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ABSTRACT

This issue contains eight articles on a wide variety of topics in business and training education. "Ethics and beyond: Enhancing Communication and Critical Thinking Skills through Ethics Instruction" (Sandra A. Howard) offers strategies for incorporating ethics instruction in the business curriculum that can also enhance students' communication and critical thinking skills. "Corporate Information Systems Security: Experience and Concerns" (Heidi R. Perreault and Nancy K. Keith) discusses findings from a survey of "Fortune 1000" firms on computer-related security issues. "Writing Self-Efficacy and Writing Apprehension: Do They Affect the Performance of Students in Written Business Communication?" (Zane K. Quible) examines the effects of writing self-efficacy and writing apprehension on writing performance. "Teaching Information Technology (IT) in a Business Classroom: Perspectives for the 21st Century" (Timothy R. Kayworth) uses Porter's 5-force model of competition to provide perspectives on the role of IT and its implication for classroom instruction. "Auctions, Agents, and Consumer Advocacy: Electronic Commerce Issues for Business Curricula" (Jo Ann Oravec) explores modes through which electronic commerce advances can be introduced into business classrooms. "Recycling Perceptions and Practices of Office Employees" (Melody W. Alexander) reports statistically significant differences between recycling practices and company size. "Relationship of Locus of Control to Teachers' Attitudes toward Annual Performance Evaluation" (Larry Bennett and Helen C. Hall) reports teachers viewed the annual evaluation's usefulness for professional development and advancement as

limited and not very helpful in improving classroom teaching. "International Business, Nebraska Style: Foreign Language and Business Education Teachers Model Curriculum Integration" (Bonnie J. Sibert) identifies models being used by business teachers to integrate complementary international business learning into any business education course. (Individual articles contain references.) (YLB)

Journal of Business and Training Education

**Volume 8
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EDITOR'S NOTES . . .

The manuscripts presented in this issue were accepted under a blind review process. Each was read by three reviewers from the Journal's editorial review board. The Journal is listed in the Cabell's Directory of Publishing Opportunities in Management and Marketing and in the Cabell's Directory of Publishing Opportunities in Education. A description of these directories is provided, here within the Journal, along with information on how to order copies of the directories.

This eighth issue of the Journal contains articles on a wide variety of topics, beginning with Sandra A. Howard's discussion on the need for ethics instruction in our business classes. In the workplace, training is being provided to promote decision making based on ethical principles. Business schools throughout America have implemented ethics instruction. In her article, Dr. Howard offers several strategies for incorporating ethics instruction in the business curriculum which can also enhance students' communications skills and critical thinking skills. Due to the widespread impact of technology, Dr. Howard also provides activities that use the Internet as an instructional tool.

Balancing the need for information systems security with the demand for new computer technology for satisfying the every-increasing user information demands is the focus of the second article. Heidi Perreault and Nancy Keith discussed the findings from their survey of Fortune 1000 firms on computer-related security issues.

Writing performance is a complex cognitive process and can be influenced by several factors. In the third article, Zane Quible's study examined the effects of two factors, self-efficacy and writing apprehension, on students' performance in written business communication.

With advances in technology, many companies have begun to change their traditional view of information technology from just a support function to a source of competitive advantage. Using Porter's five-force model of competition, Timothy Kayworth provides some perspectives on the role of information technology and its implication for classroom instruction.

In another article dealing with impact of technology, Jo Ann Oravec's article discusses the issues of electronic commerce and how it has emerged as a major form of economic exchange worldwide. Dr. Oravec presents a case for using the business classroom as ideal settings for evaluating electronic commerce technologies and assessing the social and economic issues. She discusses the implications for classroom instruction at both the high school and college settings.

In both the home and in the business environment, recycling is a common practice. To better prepare office workers to deal with the abundance of paper and to be environmentally responsible, Melody Alexander conducted a study to determine the recycling perceptions and practices of office workers. Based on her findings from 306 completed questionnaires, she provides recommendations for business employers and for business educators.

While attention has focused on the use of annual performance evaluation, little information is available regarding teachers' perception of the value of these evaluations in their professional development or in improving their teaching. To address this issue, authors Larry Bennett and Helen Hall surveyed Florida business education teachers to determine the relationship of business teachers' locus of control and attitudes toward annual performance evaluations.

To meet the future challenges of living in a global community, students will need to have the necessary language,

business, and cultural skills. There are a variety of models being implemented to integrate the curriculum to address this international literacy need. Bonnie Sibert's article provides a description of the Nebraska schools' approach to integrating international business concepts with vocational and academic subjects.

Sincere thanks are extended to all authors for their professional contributions to this issue. Appreciation also is extended to the editorial review board and to the associate editor, Betty Kleen. Acknowledgment must be given to Sandra Cash of Louisiana State University for her patience in keying the Journal. Sincere appreciation goes to our advertisers for their support.

Donna H. Redmann, Editor

JOURNAL PROFILE

Journal Description

The Journal of Business and Training Education is a national refereed publication published annually by the Louisiana Association of Business Educators. This refereed journal includes articles on various aspects of business and training education dealing with research, theory, trends and issues, curriculum, teaching methodology, technology, and personal/professional development. Manuscripts are selected using a blind review process. Each issue contains approximately four to ten articles,. The first issue of the journal was circulated in Spring 1991. Volumes 1 - 4 were entitled Louisiana Business Education Journal . All volumes of the Journal are available in the ERIC database.

Circulation/Readership

The readership is comprised of business teachers, administrators, supervisors, teacher educators, college and university students planning to become business teachers or trainers, and trainers in business & industry. The journal is distributed to all LABE members as part of membership dues and sent free of charge to the NABTE (National Association of Business Teacher Education) institutions throughout the country.

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CALL FOR PAPERS

The Louisiana Association of Business Educators invites business educators and trainers to contribute articles for publication in the Journal of Business and Training Education, a national refereed publication. Manuscripts should deal with topics of interest to educators (at both the secondary and post-secondary levels) and to trainers in business and industry. Submission of manuscripts dealing with practical topics are encouraged, as are research based or theoretical papers. Occasionally, invited authors' papers will be published. Book reviews are also accepted.

Manuscripts will be selected through a blind review process. Manuscripts should not have been published or be under current consideration for publication by another journal. **Five copies** of the manuscript, including a title page and a 50-100-word **abstract**, should be submitted to the editor. The manuscripts should range from 6 to 15 double-spaced typed pages of 12 pitch type-size, including tables and references. Manuscripts must be prepared using the style format in the Publication Manual of the American Psychological Association, Fourth Edition, 1994 (ISBN 1-55798-241-4). The **title page** is to include the title of the manuscript and the running header. The following information on each author needs to be included on the title page: full name, position title, place of employment, city, state, zip code, telephone numbers and e-mail address.

Mail Manuscripts to:

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ETHICS AND BEYOND: ENHANCING COMMUNICATION AND CRITICAL THINKING SKILLS THROUGH ETHICS INSTRUCTION

Sandra A. Howard

Abstract

This article presents strategies for helping students (1) increase their understanding of the term ethics and (2) enhance their ability to make ethics-based decisions about controversial workplace behaviors. Suggestions for integrating ethics instruction with strategies for helping students improve communication and critical thinking skills in the classroom, as well as independently through Internet resources, are also included.

The Demand for High Ethical Standards in America

At the outset of formal education in America, moral instruction held a prominent position in the halls of academe. The focus on character building eventually began to weaken, however, particularly around World War II (Menzel, 1997). Smith and Oakley (1996) chronicle moral and ethical decline that continued to worsen during the 1960s. Following the Iran-Contra affair, the Ivan Boesky and Michael Milken insider trading scandals, the Exxon Valdez disaster, and many other

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business activities in the 1980s, serious concern about unethical business practices emanated throughout the nation (Fraedrich and Guerts, 1990). Citing titles such as *Greed and Glory on Wall Street* (Auletta, 1986), *Barbarians at the Gate* (Burrough & Heylar, 1990), and *Den of Thieves* (Stewart, 1991), Gilbert (1992) asserts that moral deterioration in business matters even left its mark on contemporary books of the era.

Over the past decade, demands for higher ethical standards in business and government have escalated from various segments of our society, including religious groups, professional organizations, and the public in general. Throughout the workplace, various kinds of training programs are provided (1) to promote decision making based on ethical principles and (2) to provide a framework for dealing effectively with a broad range of dilemmas that result naturally from workplace diversity (West, Berman, Evan, et al, 1998).

The emphasis on training and instruction in ethical behavior is not confined to the workplace, however. Smith and Oakley (1996) report that tremendous financial contributions have been made for the purpose of implementing ethics instruction in business schools. At the Wharton School, the Exxon Education Foundation financed a two-year study designed to integrate ethics education into all required courses. American Medical International, Inc., made a \$100,000 contribution to the University of California at Los Angeles Graduate School of Management to help set up an ethics curriculum for the institution. The Leadership and Ethics Program at Harvard University benefitted from a \$20 million contribution from former Securities and Exchange Commission Chairman John S. R. Shad. Beyond financial contributions, the American Assembly of Collegiate Schools of Business (AACSB) has recently stated that ethics instruction is to be included in the curricula of all business schools accredited by that organization (Urbancic, 1998).

Purpose of This Article

In light of the focus on including ethics instruction in the business curriculum, the major purpose of this article is to present an activity that can be used to give students practice making ethics-based decisions about controversial behavior in business and other organizations. Initially, however, the discussion will point out other resources that can be used to help students deepen their awareness and understanding of, as well as appreciation for, the concept of ethics and ethics-related concerns. In recognition of workplace demands for entry-level workers with greater mastery of important general workplace skills (Martorana, 1997; Marzano, 1998), this article will identify ways in which the ethics activity discussed can be extended to serve as a point of focus in helping students improve or enhance essential communication and critical thinking skills. Considering the widespread impact of technology in our lives, as well as the importance of helping students acquire and maintain technological proficiency, emphasis will be given to the use of the Internet as a tool for helping students acquire increased competence in the skills discussed in this paper.

Resources for Ethics Instruction

A number of resources can be used for integrating ethics instruction into the business education curriculum. For example, representatives from local businesses, government agencies, professional organizations, and other places can be invited to visit the class to talk about experiences they have had in handling sensitive ethical issues. Some of these visitors may be able to share selected cases, simulations, audio-visuals, or other materials they use in providing ethics instruction for their workers.

In addition to classroom speakers, a myriad of other sources is available for classroom ethics instruction. Ethics-

oriented articles from newspapers all over the country can be accessed through keyword searches of Newsbank and similar CD-ROM databases. Abi-inform and other CD-ROM databases contain articles not only from newspapers, but also from professional journals, professional meetings, and many other sources. For additional variety, Harvard Business School Publishing (1999) offers case studies, journal article reprints, multimedia resources, and other materials that can be used to examine ethical concerns in the classroom. As illustrated in Kotler and Armstrong (1993) and Pride, Hughes, and Kapoor (1999), high school and college business textbooks also include ethics cases and other related materials for discussion. Additionally, videotapes from sources such as Gospel Films, Inc. (1992); Mertzman, Madsen, and Kalita (1993); and Shapiro and Kenton (1995), as well as other audio-visual aids, are available on this topic.

The Internet is also an excellent tool for incorporating ethics instruction into the classroom. Through Internet addresses and keyword searches, students can locate a multitude of current ethical concerns, some of which are still being addressed through negotiations, mediation, the courts, or in various other ways. Additionally, all kinds of organizations have home pages through which ethics-related issues and information can be accessed.

Although Internet addresses may change periodically, an abundance of engrossing, ethics-oriented material has been offered recently at a number of sites, including the following:

- A. Business Ethics Resources on WWW
(<http://www.ethics.ubc.ca/resources/business/codes.html>) – At this site, students can access codes of ethics for unions, corporations, and other business associations.

- B. Mini-cases from Lockheed Martin Corporation (<http://www.cwru.edu/affil/wwwethics/martin.html>) –Ethics-oriented articles and cases at this site can lead to exciting, stimulating classroom discussions. Interactive cases invite students to read about sensitive dilemmas and to make decisions about how to deal with the situations. Students can receive immediate feedback regarding their decisions.
- C. BEBI–Ethics Bureau.com–Spanning the Internet (<http://www.bebi.com/faq.htm>) –Visitors at this site can read about recent scams and receive suggestions on how to avoid them. In addition to providing a number of other compelling offerings, BEBI invites volunteers to sign up to help in its efforts to ensure that businesses observe ethical practices in the marketplace.
- D. Institute for Business & Professional Ethics at DePaul University (<http://www.depaul.edu/ethics/contents.html>)–At this site DePaul University provides a number of interesting offerings. Visitors can link to recent journal and newspaper articles on a variety of ethical issues. Information on materials for teaching ethics is also provided, including pedagogical resources on the net, the newsletter of the Institute for Business and Professional Ethics, and listings of other ethics institutes.

Whether a teacher prefers to use the Internet or to select a different medium, numerous learning resources are available for helping students increase their insight into ethical issues. These resources allow business educators to provide a variety of opportunities that engage students in learning and help them apply high standards to address the moral challenges certain to emerge in the workplace.

Spotlight on Ethics Assignment

Defining Ethics and Determining Its Importance in Organizations

The learning activity that is discussed next asks students to evaluate organizational behavior in terms of ethics, a complex concept that has been defined in a number of ways. Although a generally accepted definition of the term describes ethics as a set of guidelines to be used to ensure that one's behavior meets high moral standards, the class must first discuss what ethics is prior to completing the assignment. Through the discussion, the students will be able to agree on a common definition that will be used by everyone in determining the ethical or unethical qualities of the behavior being evaluated. The discussion should also address the issue of why companies should observe high ethical standards in conducting business, particularly since students will need to consider that issue in making their decisions about the behavior in question.

Selecting Appropriate Articles

The assignment begins by asking students to obtain a copy of a current news article (perhaps not more than a year or two old—whatever limit the teacher wishes to place on the article's date) involving the controversial behavior of a business, government agency, or other organization or group (See Figure 1). Also acceptable are articles about the behavior of a single individual functioning as a representative of a company or other organization, but not as a single individual on behalf of himself or herself alone.

A student with an article involving more than one kind of controversial behavior should not feel compelled to discuss each incident.

Figure 1. Sample--Assignment Sheet for Ethics Activity

Spotlight on Ethics Assignment

Assignment

Comment on a current news article involving the controversial behavior of a business, government agency, or other organization or group. Focus on a specific behavior reported or clearly implied in the article, and tell whether the behavior is ethical.

Format for the Paper

The heading for each section of your paper is given at the end of the description of the section; be sure to use the headings. Note the sample assignment below.

In the first paragraph of your paper, give the meaning of ethics, and tell why it is important for organizations to maintain high ethical standards (**Meaning of Ethics**).

In the next paragraph(s), summarize briefly but clearly the major points of the article. Someone who has not read the article should understand the major facts and controversial issue by reading your summary (**Brief Summary of Article**).

In the next paragraph, identify clearly, in one sentence, the controversial issue(s) involved (**Major Controversial Issue**).

In the last part of your paper, cite opinions about whether the behavior in question is ethical. Begin your discussion by giving the view that is in opposition to your position, and explain why supporters of the opposing view feel as they do (**Counter Perspective and Reasons**).

In the last paragraph(s), tell whether you believe the behavior is ethical, and give reasons for your opinion (**My Perspective and Reasons**).

(figure continues)

Figure 1. (continued)

Parts of the Paper

The paper you submit should contain the following three parts:

A. A cover sheet containing the following information, using a separate line for each item, and listing the items in the sequence indicated below.

1. The title of your assignment, **Spotlight on Ethics**
2. Your name
3. The name of the course
4. Class days and time
5. The current date
6. The title (in quotation marks), author, source (underlined), page number(s), and date of your article

B. The assignment described above. Your completed assignment should be no longer than two typed pages. Please single space your paragraphs, but double space between paragraphs.

C. Your article mounted NEATLY on regular 8 1/2" X 11" blank paper. You may either photocopy your article or cut it out and mount it neatly on the blank paper. Be sure to cut away ads and other materials that are not a part of the article you are reviewing. Also, be sure the margins on your mounted article are balanced.

DUE DATE _____

Instead, the student should select the one action he or she prefers to address, and discuss it. Examples of acceptable articles include stories about issues such as Dr. Jack

Kevorkian's role in helping terminally ill patients commit suicide, lawsuits filed by states to recover state funds spent on tobacco-related illnesses, and other controversial matters.

Summarizing the Articles and Evaluating the Controversial Issues

After securing appropriate articles from newspapers, journals, CD-ROMS, the Internet, or other sources, students are to summarize their articles briefly and to identify the controversial issues involved (see Figure 1). For an article on Dr. Jack Kevorkian, the controversial issue might deal with whether it is ethical to help someone commit suicide. For an article about a state's lawsuit against the tobacco industry, one person might say that the controversial issue deals with whether it is ethical for a state to sue an industry for financial reimbursement of funds spent on an illness people contracted as a result of consciously choosing to engage in behavior that could prove harmful. Another student might decide that the controversial issue in that same article deals with whether it is ethical for an industry to sell to the public a nonessential, recreational product that is connected with illness and death. Which controversial issue a student selects from an article is not important as long as the selection is reasonable based on the details presented; what is important is that the student identify an appropriate controversial issue based on the article's content.

After identifying the controversial issue, the students must discuss the behavior involved in terms of ethics (see Figure 1). Because the behavior in question is controversial, students may have strong feelings about their positions. Someone with a strong opinion is often more interested in expressing that opinion than in listening to an opposing position; therefore, this activity provides an ideal opportunity to help students understand how to handle this type of situation, particularly since two people with opposite opinions may be so

eager to get their points across that each one tries to speak over the other one. The result is often a lack of communication because both people are talking, and neither one is listening.

To help students learn to handle this type of situation effectively and to see controversial situations from more than one perspective, it may be beneficial to have the students discuss the disputable behavior in their articles from opposing viewpoints, focusing first on the position that is in opposition to the student's opinion (see Figure 1). Thus, a student who believes that Dr. Kevorkian's behavior is ethical will begin by indicating that some people feel the behavior is not ethical. The student must then give reasons why people who believe the behavior to be unethical feel as they do.

After explaining the opposing point of view thoroughly, the student is to state his or her own position—that the behavior is ethical—and support that opinion by telling why he or she feels that way (see Figure 1). The strategy of explaining the opposing perspective first may help students understand that being willing to listen to others before expressing their own opinions can be very effective in getting a point across. This strategy is particularly useful since people who have had a chance to express their opinions are often more willing to listen to, consider, and perhaps accept other viewpoints than people who are concentrating on having their own opinions heard. Allocating time for the students to tell about their articles in class can lead to enthusiastic, exciting discussion, since assessments of whether a given behavior is ethical are not likely to be unanimous.

The interactions among the students as they take turns presenting their points of view and providing evidence to support those opinions can be a broadening experience that will help the students increase their proficiency in looking at a situation from more than one perspective. This valuable

interpersonal skill can be especially important in the world of business.

Establishing Guidelines for Written Presentations

To help ensure that the students learn to create neat, professional-looking documents, specific instructions on the format of the paper should be distributed (see Figure 1). Providing an example to serve as a guide can be an effective means of being sure that the students understand clearly what they are expected to do and how they are expected to do it (see Figure 2). Written instructions, particularly when supplemented with an example, provide an ideal opportunity for the students to practice and to evaluate their own competency in an important reading skill that may often be neglected—following directions.

Figure 2. Sample-Completed Ethics Activity

<p style="text-align: center;">Spotlight on Ethics Assignment</p> <p><u>Meaning of Ethics</u></p> <p>Ethics is a set of moral values that provide guidelines for determining right from wrong. These guidelines are used to help people understand how to behave correctly. Businesses and other organizations should behave in a highly ethical manner because conducting themselves this way is the right thing to do. Ethical behavior helps to maintain an orderly, peaceful society and assures that everyone is treated with respect and fairness. People disapprove of businesses and other organizations that operate unethically and will not do business with them. Eventually, those kinds of organizations will be forced out of business because of a lack of customer support.</p>
--

(figure continues)

Figure 2 (continued)

Brief Summary of Article

Dr. Ali Khalili, a physician suffering from bone cancer, committed suicide by breathing carbon monoxide in a Michigan apartment rented by Dr. Jack Kevorkian. Although regular injections of morphine had been used for pain control, the cancer had spread through Dr. Khalili's skeleton, and Khalili was in constant, unbearable pain. Michigan has a law banning assisted suicide, and Kevorkian's lawyer would not say whether Kevorkian had assisted in Khalili's suicide. However, Khalili's suicide was the 20th at which Dr. Kevorkian had been present since 1990, and it was the first Kevorkian had attended since being released from jail on a charge of illegally assisting a previous suicide.

Major Controversial Issue

The major controversy in this situation deals with whether it is ethical for a person to help someone else commit suicide.

Counter Perspective and Reason(s)

Some people state that it is cruel to let a person who is terminally ill and in agonizing pain continue to suffer until he or she dies. After all, horses are "put to sleep" to relieve their pain. Why can't human beings receive the same kind of consideration? Emphasizing the importance of considering the "quality of life," supporters of assisted suicide believe that if a person is terminally ill and suffering unbearable pain that cannot be relieved, it is ethical to help that person commit suicide if he or she wishes to do so.

(figure continues)

Figure 2 (continued)

My Perspective and Reason(s)

Life is precious and no one has a right to play God and take away a human life—not even one's own life. It is sad for a person to be in unbearable pain, but people suffering this way do not necessarily want to die; they want to stop hurting. Doctors can use medicine to alleviate the pain.

Where there is life, there is hope, and any day a cure for an illness now considered terminal can be discovered. Therefore, a "terminally ill" patient should be kept alive as long as possible in case a breakthrough occurs and a cure is developed. For these reasons, I believe that Dr. Kevorkian has behaved in an unethical manner each time he has helped someone commit suicide.

Persons submitting grant applications, proposals for bids, and similar official documents must comply with the specifications that come with application packages, especially since applications that are not completed as directed can be declared ineligible and removed from consideration. College or scholarship applications and similar forms also have instructions that must be heeded. Therefore, requiring that students adhere to the directions in this assignment can (1) help emphasize the importance of following directions correctly and (2) provide an opportunity for the students to increase their proficiency in this critical workplace competency.

Skillful teacher guidance may be needed for students who have not learned to pay attention to details and are having difficulty following instructions as a result (Bellinger, 1994). To aid students who need to master this critical skill, business education teachers must involve the students in situations requiring a focus on reading and understanding the directions that are to be followed. Although initial lessons could have the

students read, explain, and follow fairly simple directions, subsequent activities should involve more detailed instructions that will enable the students to develop and to enhance their skills appropriately. It is crucial that students become skilled in reading and following detailed instructions independently.

Improving Communication Skills

Lively discussions about the ethics articles can provide an opportunity for the teacher to review important principles of oral communication, such as the imperative to exercise appropriate self-discipline and to wait for one's turn to speak, rather than giving in to the urge to interrupt others. Students may also need to be reminded to listen to the speaker's complete point of view, even though that person's outlook may be the opposite of what the listener believes.

Other principles students should keep in mind include speaking with respect despite a lack of agreement between or among the parties involved, controlling one's tone of voice in spite of strong feelings that one wishes to express, and focusing on the topic at hand rather than getting involved in personality clashes. Such skills are important, both in everyday life and in dealing with the diverse backgrounds and issues one is certain to face in the world of business.

The ethics activity described above provides an opportunity for the business education teacher to help the students improve or enhance a number of additional communication skills. Through making oral presentations in which the articles are summarized and controversial issues are identified, students can strengthen important aspects of oral communication such as maintaining eye contact with the audience, even when speaking from notes; using good posture; overcoming nervousness about speaking before others; developing strong openings and closings for oral presentations; and gesturing effectively. Teachers can also help the students

develop or increase proficiency in facets of vocal delivery such as volume, pitch, rate, enunciation, pronunciation, and grammar.

For the written assignment, business education teachers can share with the students tips on important writing skills such as organization and structure of ideas, grammar and usage, spelling, and punctuation. Additionally, common writing errors can be discussed, along with ways of correcting and/or avoiding the errors. Teachers might also have the students submit for feedback preliminary drafts of assignments prior to the due dates so that students can correct errors before submitting their final papers.

It may be possible that school resources such as computer-assisted tutorials, coaching in learning resource labs, and peer tutoring can be made available for students who need extra practice in order to master weak writing skills. Additional assistance can be found through keyword searches on the Internet. Sites recently offering this type of help include the following:

- A. Grammar for English Language Learners
(http://www.tcom.ohiou.edu/OU_language/english/grammar.html)
- B. Guide to Grammar and Writing
(<http://cctc.commnet.edu/HP/pages/darling/grammar.htm>)
- C. Purdue University On-Line Writing Lab
(<http://owl.english.purdue.edu/>)
- D. Common Errors in English
(www.wsu.edu:8080/~brians/errors/index.html)

Enhancing Critical Thinking Skills

Students with weak critical thinking skills have difficulty carrying out a number of important reading competencies, including the following: evaluating information, making and supporting decisions, solving problems, and drawing conclusions. Related comprehension problems lead to limited academic success because of an inability to acquire adequate understanding, insight, and knowledge needed for concept mastery. However, focused teacher guidance during ethics-oriented lessons can help the students overcome those weaknesses.

Highlighting the relationship between reading and thinking, Beyer (1998) states that "Content serves as a vehicle for applying thinking, and thinking serves as a tool for understanding content and producing knowledge." Savage (1998) asserts that "The level of student thinking, in fact, is directly proportional to the level of questions asked." Accordingly, business education teachers can help students strengthen critical thinking abilities by blending academic instruction with teaching strategies that promote the use of higher-level comprehension skills, particularly during learning activities addressing ethical concerns.

After the class has completed an assigned reading task, the business education teacher can use skillful questioning to help students improve their critical thinking skills. For instance, rather than concentrating on asking lower-level comprehension questions that have a single, "correct" answer, the instructor can focus on probing questions that stimulate thinking and involve multiple appropriate answers. Students might be asked to make generalizations, draw conclusions, and provide evidence from the reading to support their positions.

Further enhancement of critical thinking skills can be promoted by asking the students to listen carefully to the

perspectives expressed by their classmates; evaluate the opinions, along with the evidence cited to support the various positions; and determine the extent to which positions expressed are supported by information presented in the material being discussed. Students could be instructed to point out weak positions that have no support based on the details in the reading selection. Controversies inherent in ethical issues provide an ideal forum for this type of interaction.

For additional enhancement of critical thinking skills, the class might be asked to address topics such as alternative actions that could have been taken rather than the action that was taken in the article being discussed. Students could be asked to point out implications of actions taken, as well as the implications of possible alternative actions. Class members might also be asked to speculate on which action might be most effective, giving reasons for their opinions, of course.

Reading teachers on the faculty may be available to work with students who need additional assistance in developing critical thinking and/or other comprehension skills—perhaps through a reading skills center, computer-assisted tutorial, or other means. Resources such as coaching in learning resource labs, peer tutoring, and after-school or before-school tutoring may be available through the school's media center or other support systems. Volunteer community organizations sometimes provide this type of aid for students.

Numerous Internet sites list books, CD-ROMS, kits, and other materials that can be purchased to help students improve critical thinking and other comprehension skills. Resources available on-line, without cost, have been found recently at the following Internet addresses:

- A. Critical Thinking Applications, Mission Critical, San Jose State University
(www.sjsu.edu/depts/ittl/index/html)

- B. Literacy Skills Home Page, Nederland High School,
Nederland, Colorado
(<http://bvsd.k12.co.us/~ssclass/Home.html>.)

Summary

Business education teachers must integrate ethics instruction into the curriculum in order to help the students learn to handle effectively the variety of ethical challenges that are certain to arise in the workplace. Beyond proficiency in handling ethical issues, workers must also be competent in a number of essential nontechnical skills, including (1) the ability to communicate well orally and in writing and (2) the ability to think critically.

Integrating academic content with skill-building exercises in communication provides a natural and practical environment for promoting improved oral and written communication competencies. Critical thinking strategies such as those discussed in this article can be beneficial in several ways. The higher-level comprehension questions can help the students learn to ask themselves similar questions as they pursue their studies. As a result, the students will be able to experience greater academic achievement than would have been likely through a focus on recall and rote memory. Through this approach, the students will also be able to acquire clearer, more in-depth understanding of course concepts. Additionally, these strategies can help the students learn to use thought processes that lead to continued enhancement and development of critical thinking skills.

By integrating ethics instruction with strategies for improving essential communication and critical thinking skills, particularly in conjunction with the use of Internet resources, the business educator can help the students learn to master competencies that are necessary for achieving lifelong learning

skills crucial for success in the world and the workplace of today and tomorrow.

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CORPORATE INFORMATION SYSTEMS SECURITY: EXPERIENCE AND CONCERNS

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Abstract

Information Systems managers from Fortune 1000 companies provided input on the types of computing-related security incidents experienced at their organizations and on the level of concern they have regarding security issues. The majority of security-related incidents were hardware and communications malfunctions. Internet access, viruses, and disgruntled employees were the three security issues receiving the highest level of concern rating. Based on the results and the literature, the implications of this study are that companies need to implement a comprehensive security policy, conduct regular security audits, and provide training to end users on security issues.

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In order to satisfy ever-increasing user information demands, corporations are rushing to implement new computer technology. Attention is focused on providing responsive user service and staying competitive while lowering costs; however, providing information via local area networks (LANs), electronic data interchange (EDI), and external connections presents new security challenges. Information Systems (IS) professionals are faced with balancing the need for security with the demand for new computer technology.

Findings from a study completed at the National Computing Center (McTaggart, 1994), indicated that 80% of the respondents had never performed any risk analysis regarding their computer systems. Worthen (1992) questioned why organizations eager to use technology to improve their performance were not equally eager to ensure that the new technology was secure. The National Director of Information Security Effectiveness at Ernst and Young noted that information security levels were deteriorating and attributed the decline to a lack of top management concern. Instead of being concerned for data security, top management has been reacting to the pressures of staying competitive and cutting costs (Anthes, 1994).

Procedures and Objectives of the Study

Information Systems managers in Fortune 1000 firms were asked to complete a questionnaire concerning information security. The managers were asked to report computing-related security incidents their organizations had experienced within the past 12 months and their level of concern with regard to 10 security issues. In 1997, the questionnaire with cover letter and self-addressed, stamped envelope was sent to 500 IS managers throughout the United States. The names and addresses of the IS managers were obtained through a purchased mailing list. The survey instrument was developed based on a review of computer security literature, field tested

by five IS professionals, and modified according to their input. Fifty-three completed surveys were included in the study.

The proportion of managers responding that their organization had experienced a specific computing-related incident was calculated. Additionally, the reported incidents were ranked in descending order according to their frequency of occurrence. For security issues, the managers' mean level of concern for each issue was calculated. The security issues were also ranked in descending order according to the magnitude of the managers' mean level of concern.

The objectives of this study are two-fold. They are to identify:

- 1) the recent computing-related security incidents experienced within the IS professionals' organizations, and
- 2) the security issues that IS professionals believe pose the greatest risk to their organizations.

Review of Related Literature

As networks are developed and expanded, experts warn that not enough attention is being given to data security (Sheehy & Trites, 1995; Morrissey, 1996; Anthes, 1994). Over 50% of the IS managers participating in a recent survey reported that although critical applications were running on the LANs, their company's LANs offered inadequate security (Anthes, 1994). According to Morrissey (1996), a main reason for the lack of security is the pressure exerted on developers to expand existing systems and develop new systems. Sheehy and Trites (1995) noted that networking put a strain on security procedures because security is more complex for networked environments than for traditional, centralized systems.

Geary (1994) reported that federal guidelines consider protecting information a management standard and hold an organization's top executives responsible for installing effective computer security. Security includes restricting internal access to data and networked resources, preventing intrusions by outsiders, and ensuring that duplicate copies of critical data are created (Rudich, 1997). Morrissey (1996) strongly advised organizations to reconsider their "lukewarm" concern about safeguarding data and give high priority to security issues as systems are developed and expanded.

For the purposes of this discussion, security issues are grouped into two major categories. The first category is titled Information Integrity, and it includes protecting data from error, unauthorized access, and malicious damage to data. The second category, which includes theft of equipment, environmental dangers, and natural disasters, is called Physical Dangers.

Information Integrity

Local area networks and distributed networks are vulnerable. Not only are security breaches a problem, but information loss is very possible. According to Appleton (1993, p. 79), an "open, secure network is an oxymoron." As workstations replace data centers as the backbone of corporate data processing, massive amounts of sensitive information reside on desktop systems with minimal protection (Worthen, 1992).

User Authentication. Along with backup procedures, user authentication is a standard security measure used to protect information. Its purpose is to maintain the integrity of information by preventing accidental or intentional access to sensitive information. Only individuals who have explicit permission to read or change the data are allowed access to the files. Passwords are the most common form of user

authentication. Tuomy (1996) stated that passwords are not adequate because "they are subject to human fallibility as well as technical weaknesses that make them easy to steal, copy, and otherwise compromise" (p. 33). Users have been known to post passwords next to their computer, use their name or birth date as the password, and to incorporate passwords into startup procedures. Passwords also can be stolen as they move over the network with the user of "sniffer programs" (Tuomy, 1995).

Sheehy and Trites (1995) acknowledged that passwords are inadequate in many environments, yet passwords are the only security measure used in many organizations. To prevent the misuse of passwords, users should be educated about the need for security. Data security needs to be "everyone's business" according to Romney (1995). Another preventive measure is to build multiple security levels and to become stringent about identifying remote users. Passwords should allow a user access to specific areas of the computer network; they should not allow users to "roam freely" (Tuomy, 1995).

Malicious Damage. A security risk that has received a lot of attention in the popular press is computer fraud. Computer fraud includes altering data, altering or stealing files, destroying files, and stealing software or output. The American Bar Association found that in one year 50 percent of business and government institutions uncovered at least one incident of computer fraud. The National Center for Computer Crime Data concludes that the cost of computer crime exceeds \$555,000,000 a year and the average cost of computer fraud is \$109,000 (Romney, 1995).

The National Computer Security Association warns that it is disgruntled employees who commit as much as 25 percent of the computer fraud. Although the perpetrators may be individuals who have just received a "pink slip," often they are employees who are having financial problems or feel they have

been overlooked. One solution is to divide duties so the person preparing paperwork for payment is not the same person who issues the check. Also recommended is rotating employees and changing passwords on a regular basis (Harper, 1994).

Virus Protection. A computer virus is a program that can deliver unwanted messages, slow a system, or destroy files. Viruses are typically introduced when files are downloaded or through the use of floppy disks (Vandagriff, 1994). It is estimated that 150 to 200 new viruses appear each month. Each virus tends to be a small application that attaches itself to executable files, data files, or a disk's boot sector and replicates itself whenever the user opens the infected file, runs an infected application, or boots from an infected systems. Virus protection software is available and should be installed at all points where an infected file could enter a system.

Internet Connections. Remote access increases the risk of data exposure. Computer access once limited to in-house users is now available to outsiders. As organizations expand their computer resources to include a home page on the World Wide Web and Electronic Data Interchange with customers and suppliers, security concerns multiply (Sheehy & Trites, 1995). The gains from the two-way sharing of information must be measured against the risk of information theft or damage. One protection is a firewall. A firewall is a combination of hardware and software designed to monitor network traffic coming into and going outside the organization. Only authorized information is permitted to flow through the firewall (Mohta, 1996). Sheehy and Trites (1995) warn that the effectiveness of firewalls has not yet been proven. They suggest a firewall be considered a security precaution.

Physical Dangers

Fires, floods, earthquakes, malfunctions, and theft are risks that must be considered when designing a computer security plan. If an organization is unable to recover quickly data and network use after a serious disaster, it can expect to "go under." Yet many organizations' security plans do not have a disaster-recovery strategy (Johnston, 1996). Lee and Ross (1995) attribute the lack of preparation to managerial oversight. Because disaster avoidance is obviously everyone's responsibility, no one is really in charge. The result is that less than 25% of US corporations have a formal disaster recovery plan.

Natural Disasters. Approximately 10 to 20 percent of data center interruptions are from natural causes (Forcht, 1994). Two basic defensive strategies are used to combat natural disasters. One strategy is to provide protection to the computer facility. A computer center should be located in a windowless, above-ground level location with fire-resistant access doors and nonflammable walls (Forcht, 1994). A secondary power source should be available to protect against data disruption and corruption (Johnson, 1996). The second strategy is to protect the information. It includes the use of data safes and off-site storage. Critical files need to be in a secured area. Cruden (1996) recommends that at least one copy of critical files be stored off site.

Malfunctions. Hardware, software, and network systems malfunctions produce two serious problems. One is the possible loss of data, and the second is the loss of productivity and revenue. Ontrack Data International reports that 44% of all data loss is from hardware or system malfunctions and 14 % of data loss is from software malfunctions. Lost revenue and productivity for a four-hour on-line outage costs an organization an average of \$329,000 (Semer, 1998). McCunne (1999) notes that many companies are "in denial" about computer malfunctions. She stresses the need to plan for the possibility of critical software failing and

technology breakdowns. No technology will last forever. All organizations should have a contingency plan for when technology does fail.

Equipment Theft. Another physical danger is theft of equipment. A current trend is to steal only modems and chips. The components are easy to sell on the black market because typically they do not bear any company identification code. Users may not even realize a theft has occurred. They assume a malfunction and send the unit for repair. Repair department personnel should be responsible for reporting all missing parts to security. At least half of the component thefts, however, are employee-related according to the American Society of Industrial Security (Cornwell, 1995). Prevention includes standard theft prevention techniques such as limiting access to equipment after hours and maintaining an inventory of computer components (Neldon, 1996).

Laptop Use. Laptop computers pose a dual security risk. When a theft of a laptop occurs, both the computer and the data are lost. To protect the data, a boot-record encryption program should be used. Without the proper password, the disk is unreadable (Vandagriff, 1994). Neldon (1996) suggests carrying the laptop in a standard business briefcase instead of a standard computer case to avoid calling attention to the laptop.

Results and Discussion

IS managers in Fortune 1000 firms shared the computing-related security incidents their organizations had experienced within the prior year and reported their level of concern with respect to common security issues.

Computing-related Incidents Experienced Within the Last 12 Months

The IS managers were asked to provide a list of computing-related incidents their organization had experienced within the past 12 months. Ten computing incidents and the proportion of managers responding that their organization had experienced the incident are contained in Table 1. The incidents are categorized as Information Integrity or Physical Dangers.

Table 1

Computing Incidents Experienced Within the Last 12 Months

Computing Incident	Proportion ¹ (%)	Overall Proportion Rank ²
Information Integrity		
Password exposure	49.1	5
Unauthorized system access	32.1	6
Information leaks	22.6	7
Computer fraud/crime	22.6	7
Physical Dangers		
Hardware malfunction	86.8	1
Communication loss (voice or network)	66.0	2
Software malfunction	60.4	3
Power loss	58.5	4
Water damage	7.5	8
Computer room fire	1.9	9

¹ (Number of responses)/53

² The 10 computing incidents are ranked according to their proportions from 1=highest proportion to 9=lowest proportion. Two of the 10 security incidents had identical proportion and therefore the same rank.

Within the category of Physical Dangers, over 50 percent of the managers indicated that they had experienced

hardware malfunction, communication loss (voice or network), software malfunction, and/or power loss. Hardware malfunction was by far the most frequently occurring computing incident with 86.8 percent of the managers reporting that their organization had experienced a malfunction in the last 12 months. The high number of organizations reporting malfunctions corresponds to the literature which indicates many organizations' IS staffs are so busy handling hardware, software, and communication problems, they do not have time to develop adequate contingency plans. Semer (1998) encourages organizations to consider scenarios such as power outages and hardware and software failures when developing disaster recovery plans.

To a lesser extent, the computing incidents within the category of Information Integrity occurred. Included in the category of Information Integrity are information leaks, unauthorized system access, password exposure, and computer fraud/crime. The responses parallel a survey conducted by the Computer Security Institute indicating 42% of U.S. companies experience unauthorized use of their computer systems (Muckley, 1997).

Computer fraud/crime was reported by 22.6 percent of the managers, which is low according to the literature. While respondents were not asked to indicate whether an outsider or an employee perpetrated the incidents, Backhouse & Dhillon (1995) indicate that most incidents do involve employees. They stress the need to examine each incident of computer fraud to understand why and how it occurred, to put steps in place to prevent it from happening again, to report the crime to authorities, and to engage in awareness campaigns to educate employees on computer fraud/crime.

Security Issues Level of Concern

The IS managers rated their level of concern with regard to 10 security issues. On the five-point rating scale, a 1 indicated "not concerned" whereas a 5 indicated "extremely concerned." Table 2 contains the IS managers' mean level of concern rating for the 10 security issues which are grouped into two major categories - Information Integrity and Physical Dangers.

Table 2

Security Risk Level of Concern Rating

Security Issue	Mean Level of Concern Rating ¹	Overall Rank of Level of Concern Rating ²
Information Integrity		
Internet access	4.12	1
Disgruntled employees	3.83	2
Viruses	3.83	2
Unauthorized access	3.72	3
Password exposure	3.60	4
Network hackers	3.60	4
Information leaks	3.30	6
Physical Dangers		
Theft of computer Equipment	3.38	5
Use of laptop computers	3.30	6
Natural disasters	3.08	7

¹ 1 = Not Concerned to 5 = Extremely Concerned

² The 10 security risks are ranked according to their mean ratings from 1 = highest mean rating to 7 = lowest mean rating. Three of the 10 security risks received identical mean ratings and therefore the same rank.

All security issues received a mean rating above 3.0. In the category of Information Integrity, managers were most concerned about Internet access. This finding is consistent with the literature. Paone (1996) noted that the Internet is the focal point for security concerns. He also warned that IS professionals should focus more on their internal security because three out of four security breaches are internal. Disgruntled employees (3.83) did receive a higher concern rating than hackers (3.60) which may indicate that IS professionals are aware that more security breaches are instigated by current staff members than by outsiders.

Computer viruses tied with disgruntled employees as the second highest mean level of concern rating. The high rating indicates that the IS professionals are well aware of the dangers associated with computer viruses. The viruses are particularly dangerous to offices where backup procedures are not standard operating procedure. A computer consultant from Florida has documented the spread of viruses in law offices. His findings indicate 10 to 15 percent of all floppy disks are infected (Vandagriff, 1994). Using virus detecting software is an economical means for preventing the damage by detecting and eliminating a virus before it can attack files.

Unauthorized system access ranked third and password exposure and network hackers tied as the fourth highest security risk concerns. The fact that under half of the respondents had experienced incidents of password exposure, unauthorized system access, and information leaks may indicate that the IS managers have security measures in place to prevent such incidents. The literature stresses that passwords are too often used as the only means of protecting information. If passwords are the main security measure, users should receive training on safeguarding information and taking responsibility to prevent password exposure.

Theft of equipment and the use of laptop computers ranked fifth and sixth as a security risk concern. Losing the equipment is a monetary loss, but the loss of the data contained on the computers' hard drives may have more serious consequences to the organization. Security guidelines regarding the type of data that can be stored on hard drives needs to be shared with end users. Data can be defined by its degree of importance to the organization ranging from public data to highly confidential. Information that is defined as "confidential" in nature needs additional protection. Such information should not be stored on a laptop computer's hard drive unless it is encoded.

Natural disasters received the lowest level of concern rating. The rating may reflect the IS professional's more immediate concern with reoccurring risks such as viruses, unauthorized access, and theft of equipment. Few of the IS managers indicated any serious damage due to water or fire during the past 12 months. Natural disasters are serious risks because they are more likely to have widespread repercussions than isolated incidents of access or theft. All organizations should have a disaster-recovery plan in place.

Summary

The 53 IS managers from Fortune 1000 companies provided input on computer security concerns. They were asked to share the types of computing-related incidents they have experienced in the past 12 months in their organizations and to indicate their level of concern for ten security issues using a Likert-type scale.

The IS professionals provided input on the types of computing incidents their organizations had experienced within the past 12 months. The majority of the incidents were hardware, software, and communications malfunctions. This finding is consistent with the research that reports IS staff

members are overwhelmed with solving equipment and network malfunctions as their organizations expand their computing systems. Because IS staff are so preoccupied with solving equipment and software problems, they may not be giving information security enough consideration. Password exposure was reported by almost half (49%) of the respondents as a security incident occurring within their organization. The literature stresses the importance of providing end user training on security issues to prevent the misuse of passwords.

Internet access received the highest mean rating indicating the highest level of concern. Managers had the least concern for the security risk of natural disasters. These findings are consistent with the literature that warns that too much attention is being directed at Internet security. More concern should be focused on internal access and on having an overall disaster-recovery plan. The IS managers were aware that employees pose a higher risk to information security than do outsiders. As much as 75% of data lost is caused by insiders and 55% is error or omission (Vandagriff, 1994).

Implications

Information security challenges increase as organizations expand their corporate computing tools to include Intranets, web-based technology, and organization-wide collaborative networks (Violino, 1996). Information security should be a concern of all employees, not the sole responsibility of the IS staff. Upper management needs to be involved in setting computer-related security plans, and all employees must take responsibility for securing information assets.

Three specific means for protecting corporate assets are provided.

1. An overall security plan needs to be developed. Paone (1996) warns that organizations are focusing

on specific issues such as Internet security, while development of an overall security policy remains "spotty." Regular computing security audits should be implemented as standard operating procedure just as regular audits are conducted for other corporate assets.

2. A second means of improving security is education. Awareness campaigns can educate employees about computer security issues and help them understand their role in protecting corporate assets. The training must include why passwords are used and why they must be protected, how to protect files from computer viruses, how to backup files, and how to secure information from casual or purposeful observation.
3. A third measure is to implement, communicate, and enforce computing policies (Geary, 1994). The policies need to include appropriate disciplinary standards for violations. The purpose is not to intimidate employees but to educate them and to clearly explain the consequences of failing to protect or respect computer assets.

Attention to these three specific areas will increase management and employee awareness of security issues and increase information systems security at all levels of the corporation.

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WRITING SELF-EFFICACY AND WRITING APPREHENSION: DO THEY AFFECT THE PERFORMANCE OF STUDENTS IN WRITTEN BUSINESS COMMUNICATION?

Zane K. Quible

Abstract

This study was undertaken to answer two questions: (1) What is the nature of the relationships among writing self-efficacy, writing apprehension, and writing performance of students enrolled in a written business communication course? and (2) Do changes take place in students' writing self-efficacy, writing apprehension, and writing performance assessments during a 16-week semester?

In the current study, writing performance at the beginning of the semester was related to the skills component of the writing self-efficacy scale; however, when both were measured at semester's end, no relationship was found. Writing apprehension was not found to be significantly related with writing performance at either the beginning or ending of the semester. But during the semester, significant changes took place in students' writing self-efficacy and in the two components (tasks and skills) comprising writing self-efficacy.

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Self-efficacy, the belief held by individuals that they are capable of performing in a particular way, is an important aspect of the social cognitive theory popularized by Bandura (1986). He defines self-efficacy as being "People's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (p. 391). Bandura (1986) believes self-efficacy is concerned with judgments about what individuals can do with whatever skills they possess but is not concerned with the skills they actually possess. Shell, Murphy, & Bruning (1989) concur with Bandura in their view of self-efficacy: They see it as the mechanism through which individuals "integrate and apply their existing cognitive, behavioral, and social skills to the performance of a task" (p. 91).

Although self-efficacy and self-concept have a number of similarities, they differ in one important way, according to Pajares & Miller (1994). Whereas self-efficacy is a context-specific appraisal of an individual's capability of performing a specific behavior in a specific situation, self-concept is more broad and is not measured at such a context-specific level. Essentially, self-concept pertains to an individual's self-worth and his/her perceived overall competence.

Bandura (1986) believes self-efficacy helps explain why two individuals with similar skills or the same individual on different occasions may perform either inadequately, adequately, or extraordinarily well. Bandura (1986) cites several research findings which indicate that self-efficacy is a "significant determinant of performance that operates partially independently of underlying skills" (p. 391). Therefore, how individuals perform is often better predicted by their beliefs about their capabilities than by actual measures that predict performance.

Writing performance, as a complex cognitive task, is influenced by self-efficacy, according to Shell, Murphy, & Bruning (1989). Furthermore, self-efficacy was found to be a predictor of writing performance of freshman college students (McCarthy, Meier, & Rinderer, 1985), although the relationship between beliefs and writing performance has not been extensively examined (Shell, Murphy, & Bruning, 1989; Pajares & Johnson, 1994). Students in the study conducted by McCarthy, Meier, & Rinderer (1985) who had strong self-efficacy beliefs wrote better essays than those with weaker efficacy beliefs. McCarthy, Meier, & Rinderer (1985) state that because some students overestimate their writing ability whereas others underestimate their writing ability, some instructional effort may be needed that focuses on helping them correctly assess their writing ability.

Although students may actually have the ability to write well, believing that they cannot do so will actually hinder their writing performance in spite of their knowing what is expected of them and understanding the necessary steps to carry out the task. Therefore, when individuals have reason to believe their writing performance has improved because of the feedback received, it will improve. Hence, improvement begets improvement. Not only will heightened beliefs have a positive impact on writing performance, but also these beliefs "can affect what behavior people will attempt in the first place and how long they will persist in the face of obstacles" (McCarthy, Meier, & Rinderer, 1985, p. 466).

Daly & Miller (1975) label writing apprehension as a form of writing anxiety and suggest writing apprehension has powerful effects on students' attitudes toward and behavior in writing courses as well as the willingness to take additional writing-oriented courses. In fact, according to McCarthy, Meier, & Rinderer (1985), individuals who experience greater

levels of writing apprehension tend to be less effective writers than those who are less apprehensive.

The Current Study

The current study was undertaken to provide answers to the following research questions:

RQ1. What is the nature of the relationships among writing self-efficacy, writing apprehension, and writing performance of students enrolled in a written business communication course?

RQ2. Do changes take place in students' writing self-efficacy, writing apprehension, and writing performance assessments during the course of a 16-week semester?

Subjects

Participants in the study were 67 students of the 69 (2 students were absent on one or the other of the 2 data-collection days) who were enrolled in a written business communication course (two sections) at a large midwestern state university. All were classified as juniors or seniors. The majority were business majors, with a few majoring in agriculture or education fields. The researcher is the instructor who taught both sections of the course. No differences existed between the two sections regarding material presented, assignments given, class procedures followed, instructor-student interaction, or end-of-semester course average.

Statistical Analysis

The statistical analyses used in this study were performed using StatView, a statistical computer program marketed by Abacus Concepts. It was used to calculate the correlations between the dependent variable (writing

performance) and independent variables (writing self-efficacy and writing apprehension). T-tests were run on the data to determine the nature of any changes taking place between pre- (beginning of semester) and post-administration (ending of semester) measurement of the writing self-efficacy scale and the writing apprehension scale, as well as the essay used to assess pre- and post-administration measurement of writing performance.

Methodology and Measurement of Variables

This section includes a discussion of the variables involved in this research study and methodology as it relates to the variables.

Writing Performance. To assess writing performance, subjects were asked to prepare an essay on the topic "What do you believe to be the qualities of a successful teacher?" This same essay topic was used in the research conducted by Shell, Murphy, & Bruning (1989) and Pajares & Johnson (1994).

Writing performance was measured the second class period of the semester (hereafter referred to as the pre-administration) and using the same essay topic, again during the last week of the semester (hereafter referred to as the post-administration). Subjects were given 30 minutes of writing time.

Both administrations of writing performance were scored using the holistic evaluation method discussed by Cooper (1985). A four-point scale (4, high; 1, low) used by Shell, Murphy, & Bruning (1989) was also used in the scoring process. Although Shell and his colleagues evaluated the essays on five criteria (realization, clarity/quality, organization, quantity/density, and language mechanics/usage), consistent with procedures used by Pajares & Johnson (1994), only the language mechanics/usage criterion was considered in

holistically scoring the essays in the current study. The language mechanics/usage criterion involves many of the elements of writing that comprise the writing skills self-efficacy subscale, which provided the data for one of the current study's independent variables.

Two doctoral students in the English program at the researcher's university holistically scored both the pre- and post-administration measurement of writing performance. The scoring sessions began with the researcher's conducting a training session covering the scoring points of interest. When the training process progressed to where the two evaluators and the researcher were identifying the same points of interest in evaluating the essays and when a high level of interrater reliability was being attained, the official evaluation began.

On the pre-administration measurement of writing performance, the two raters achieved an interrater reliability coefficient of .859; on the post-administration measurement, the coefficient was .885. According to White (1985), holistic essay reliabilities generally range between .68 and .89 when adequate statistical methods are applied. The official score given each essay was the average of the points assigned by the two evaluators. Thus, points of 4 and 3 produced an official score of 3.5; points of 4 and 4 produced an official score of 4. White (1985) reports that a 1-point difference between the scores assigned by two raters is allowed but that a difference of 2 or more points needs to be resolved by having the papers read a third time, a procedure that was also followed in this study.

Writing Apprehension. According to Daly & Miller (1975), "Individuals with high apprehension of writing would fear evaluation of their writing, for example, feeling that they will be negatively rated on it" (p. 244). Therefore, Daly & Miller (1975) believe individuals with high levels of writing apprehension will avoid writing when possible; but when they

are forced to write, they tend to exhibit high levels of anxiety. The scale developed by Daly & Miller (1975) consists of 26 sentences to which respondents indicate their level of agreement or disagreement. Sentences pertain to such topics as avoidance of writing, fear of having writing evaluated, feeling that results from handing in a composition, level of enjoyment generated by undertaking a writing task, etc. A reliability measure of .89 was reported in the process of validating their instrument.

Although Daly & Miller (1975) used a 5-point Likert scale, Reed, Burton, & Vandett (1988) recommended the Daly & Miller scale be administered using a 4-point Likert scale (omitting the "uncertain" choice). Consistent with the process used by Pajares & Johnson (1994) who adapted the Daly & Miller scale to a 4-point Likert scale in their research, a 4-point Likert scale was also used in the current study.

Writing Self-Efficacy. To measure writing self-efficacy, the scale developed by Shell, Murphy, & Bruning (1989) was used. The writing self-efficacy scale consists of two parts: tasks and skills. The tasks component consists of 20 sentences designed to assess the subject's confidence about his/her ability to prepare different writing tasks (instructions outlining how to play a card game, a 15-20 page term paper, an essay expressing a view on a controversial topic, a brief autobiography, etc.). The skills component consists of 8 sentences designed to assess the subject's confidence about his/her ability to perform writing skills (correctly spell all words in a one-page passage; correctly punctuate a one-page passage; correctly use parts of speech; correctly use plurals, verb tenses, prefixes, and suffixes; organize sentences into a paragraph that expresses a theme, etc.). Subjects completing the scale could provide any number between 0 and 100 (0, no confidence; 100, total confidence). Shell, et.al. (1989) reported reliability scores of .92 for the tasks component of the scale and .95 for the skills component of the scale.

Results

Based on correlational analysis, Table 1 shows the nature of relationships among the variables that comprise this study. The specific variables presented include the following:

- Writing performance (both pre- and post-administration)
- Writing self-efficacy (both pre- and post-administration)
- Tasks subscale (both pre- and post-administration)
- Skills subscale (both pre- and post-administration)
- Writing Apprehension (both pre- and post-administration)

An examination of the Table 1 reveals a number of significant relationships ($p < .05$, $p < .01$, and $p < .001$). Some of these results support the findings of research reported earlier while other results contradict such findings. Similarities and differences among the results of this study and other studies are presented in the discussion section.

Research Question 1

This research question was stated as follows: What is the nature of the relationships among writing self-efficacy, writing apprehension, and writing performance of students enrolled in a written business communication course? The research results indicate that these variables are related to one another, although some are related at a higher statistically significant level than are others. Too, the relationships were found to change over a 16-week semester, as reflected in the pre- and post-administration measurements. Some discrepancies were found among these results and what other research study results indicated would be found.

Writing Self-Efficacy. The writing self-efficacy scale is comprised of three components: tasks, skills, and a composite of the two (known as writing self-efficacy). Writing self-efficacy

Table 1

Correlations of Study Variables

	1	2	3	4	5	6	7	8	9	10
1. Writ. Perf. (Post)	1.000	-.067	.169	.014	-.039	-.007	-.114	.148	-.053	.408†
2. Tasks Subscale (Pre)		1.000	.738†	.970†	-.675†	-.568†	.622†	.657†	.683†	.125
3. Skills Subscale (Pre)			1.000	.880†	-.509†	-.426†	.488†	.835†	.621†	.366†
4. Writ. Self-Ef. (Pre)				1.000	-.659†	-.554†	.614†	.763†	.705†	.209
5. Writ. App. (Pre)					1.000	.806†	-.387†	-.481†	-.444†	-.141
6. Writ. App. (Post)						1.000	-.434†	-.485†	-.483†	-.120
7. Task Subscale (Post)							1.000	.600†	.977†	.197
8. Skills Subscale (Post)								1.000	.756†	.341†
9. Writ. Self-Ef. (Post)									1.000	.252*
10. Writ. Perf. (Pre)										1.000

*p < .05; †p < .01; ‡p < .001

is calculated by summing the individual's tasks and skills scores.

At the pre- and post-administration measurements of writing self-efficacy, this study found

1. A significant positive relationship between writing self-efficacy and its tasks and skills components, which indicates that students who are confident writers also possess confidence in preparing a variety of types of documents (tasks) as well as possess confidence in their writing-oriented skills.

2. A significant negative relationship between writing self-efficacy and the pre- and post-administration measurement of the writing apprehension scale, which indicates that as the subjects' writing apprehension increased, their writing self-efficacy diminished.

3. A significant positive relationship between writing self-efficacy and the pre-administration measurement of writing performance, which indicates that some subjects likely had more confidence in their writing self-efficacy early in the course. However, during the course of the semester, the outcome of the evaluation of their writing possibly caused some of this writing self-efficacy to disappear. The post-administration measurement of writing self-efficacy and writing performance were not significantly related.

Writing Apprehension. At both the pre- and post-administration measurements, the current study found

1. A significant negative relationship between writing apprehension and writing self-efficacy, which likely indicates those who have less writing confidence experience greater writing apprehension.

2. A significant negative relationship between writing apprehension and the tasks component, which indicates that those who have greater writing apprehension are less confident they can successfully prepare a variety of written documents.

3. A significant negative relationship between writing apprehension and the skills component, which indicates that those who have greater writing apprehension are less confident they have mastered a variety of writing skills.

Writing Performance. This study found several significant relationships between actual writing performance (dependent variable) and other of the study's variables (independent variables). At the pre-administration measurement, the following was found:

1. A significant positive relationship between writing performance and the pre- and post-administration measurements of the skills component of the writing self-efficacy scale, which indicates that those students who have confidence in their writing skills tended to write higher-quality documents.

2. A significant positive relationship between writing performance and the post-administration measurement of writing self-efficacy, which is likely explained by the impact that the writing skills' component has on overall writing self-efficacy.

At the post-administration measurement of writing performance, the following was found:

1. A significant positive relationship between writing performance and the pre-administration measurement of writing performance, which generally occurs in the pre- and post-measurement of the same variable.

Research Question 2

The wording of Research Question 2 was as follows: Do changes take place in students' writing self-efficacy, writing apprehension, and writing performance assessments during the course of a 16-week semester? The research results indicate that changes do take place in students' writing self-efficacy and its two components (tasks and skills). Although not at significant levels, students became less apprehensive during the semester; and their writing performance improved. Several variations occurred in what was actually found and what social cognitive theory suggested would be found, however.

Table 2 shows the t-test analysis results used to assess changes that occurred in the means of the variables assessed at the beginning (pre-) and ending (post-) of the semester. Examining the table shows significant differences were found between the pre- and post-administration measurements of the overall writing self-efficacy scale and its two components (tasks and skills) but not between the two administrations of the writing apprehension scale nor writing performance. A 24.57 percent increase occurred between the means of the two administration measurements of the tasks component of the overall writing self-efficacy scale, a change significant at the $p < .001$ level. A 5.37 percent increase occurred between the means of the two measurements of the skills component of the overall writing self-efficacy scale, representing a change significant at the $p < .01$ level. The overall writing self-efficacy scale, a composite of both the tasks and skills components, saw a 18.56 percent increase in the post-administration mean, which was significant at the $p < .001$ level. Although not at a statistically significant level, the students' writing performance increased over the semester; and their writing apprehension decreased over the semester.

Table 2

Pre- and Post-Administration Means of Overall Writing Self-Efficacy and Its Component Scales (Tasks and Skills), Writing Performance, and Writing Apprehension

	Pre-Test Mean	Post-Test Mean	Difference	t-Value
Tasks Component	1364.04	1699.31	335.27	7.398†
Skills Component	623.43	656.92	33.49	2.950†
Overall Writing Self-Efficacy	1987.47	2356.23	368.76	7.311†
Writing Performance	2.91	3.08	.17	1.895
Writing Apprehension	72.86	71.32	-1.54	-1.456

*p < .05; †p < .01; ‡p < .001

Discussion

Included in this section is a discussion of Research Questions 1 and 2, focusing primarily on how the results of the current study confirm or contradict the findings of other studies.

Regarding Research Question 1, data collected at the beginning of the semester indicate that students' writing performance is significantly related with the skills component of the overall writing self-efficacy scale but not the task component nor the overall writing self-efficacy scale. At the end of the semester, the collected data indicate that students' writing performance is no longer significantly related with the skills component, the tasks component, nor overall writing self-efficacy scale. Although the work of Pajares & Johnson (1994) and Shell, Murphy, & Bruning (1989) suggests the current study would have found a significant relationship between post-administration measurement of writing performance and writing self-efficacy, such was not the case.

What might explain the change in the significance of the relationship between pre- and post-administration measurement of (1) writing performance and (2) the skills component? One possible explanation is the change in students' confidence over the course of the semester regarding their ability to apply correctly standard rules of grammar and punctuation. Students might have overestimated their writing skills proficiency when they completed the overall writing efficacy scale (comprised of both tasks and skills components) the second class period of the semester, a tendency mentioned by McCarthy, Meier, & Rinderer (1985). Shortly thereafter, three class periods were devoted to a review of various elements comprising the writing skills component. Following that review, students were periodically assigned to study during the remainder of the semester various sections of the *Writing Improvement Handbook* (Quible, 1996) prior to their taking five announced

quizzes over the material. By the semester's end, the students likely had rather conclusive evidence about the nature of their writing skills' proficiency.

Writing apprehension was not found to be related significantly to writing performance during either its pre- or post-administration measurement in the current study, a finding that is consistent with Pajares & Johnson (1994). They express the lack of change between the pre- and post-administration measurement of the writing apprehension scale in their study to be puzzling, given the confidence of their subjects to accomplish more writing tasks. It is also puzzling in the current study, given the effort devoted to the preparation of a variety of tasks as well as development of writing skills. Perhaps the attitude that "the more people know, the more they realize they don't know" comes into play, an attitude that likely does little to decrease writing apprehension.

In the current study, writing apprehension was negatively related at significant levels with the three components (tasks, skills, overall) of both the pre- and post-administration measurement of the writing self-efficacy scale. Two elements of this finding in the current study (tasks and overall) are consistent with the results of the study by Pajares & Johnson (1994) but contradict a third element as they did not find a significant negative relationship between writing apprehension and the skills component found in the current study.

Regarding writing self-efficacy (tasks, skills, and overall), the significant relationships in the current study found between the pre- and post-administration measurements of the assessment scale are consistent with findings in the Pajares & Johnson (1994) study. But the current study did not find a significant relationship between the skills component of the writing self-efficacy scale and writing performance that Pajares

& Johnson (1994) found. However, the current study found a significant negative relationship between the skills component and writing apprehension that Pajares & Johnson (1994) did not find, a relationship that is predictable, assuming that as a person's writing skills increase, his/her writing apprehension should decrease.

Regarding Research Question 2, puzzling in the current study and also to Pajares & Johnson (1994) is why the statistically significant increase in the students' overall writing self-efficacy didn't result in a significant reduction in writing apprehension, as social cognitive theory suggests should occur. This may suggest that writing apprehension over the long run is slow to disappear even when students' confidence in their writing skills and the documents they prepare increases in the short run. Too, the fluidity of students' self-efficacy may be situational in light of research conducted by Mone, Baker, & Jeffries (1995) who found rather consistent results when assessing students' self-efficacy scores three times during a 15-week semester college level introductory management course. This finding leads Mone, Baker, & Jeffries (1995) to believe that at this stage of the participants' lives (college-age students), self-efficacy becomes relatively fixed. However, the results of the current study, which used a different assessment scale and was concerned with students in a different course, readily indicate that writing self-efficacy is not relatively fixed among the college students involved in this study.

Conclusions and Recommendations for Further Research

This study was undertaken to examine the relationships among writing self-efficacy, writing apprehension, and writing performance of students enrolled in a written business communication course. A related purpose was to determine whether changes in students' writing self-efficacy, writing apprehension, and writing performance occurred during the course of a 16-week semester.

Results of the current study show that the skills component of the writing self-efficacy scale affected students' writing performance at the beginning of the semester but not at the end. Writing apprehension did not affect students' writing performance either at the beginning nor end of the semester. The lack of a significant relationship between the post-administration of the skills component of the overall writing self-efficacy scale and students' post-administration writing performance contradicts results of research reported by Pajares & Johnson (1994) and Shell, Murphy, & Bruning (1988). That the students participating in the study were subjected to review (both in-class and self-study) and were subsequently subjected to quizzing may account for the lack of a significant relationship between the skills component and writing performance. One might speculate that the more opportunities the students had to apply this knowledge, the more evidence they had that they had not fully mastered the material, resulting in smaller increases in skills component of writing self-efficacy. The subjects participating in the studies conducted by Pajares & Johnson (1994) and Shell, Murphy, & Bruning (1988) did not receive a review of writing skills. Further research is needed to determine what effect a semester-long structured review of writing skills has on students' writing performance, their writing self-efficacy, and their writing apprehension.

Consistent with the research results reported by Pajares & Johnson (1994), the lack of a significant relationship in the current study between writing apprehension at the beginning and end of the semester and writing performance at the beginning and end of the semester is predictable. But according to Bandura (1986), "... those who regard themselves as inefficacious shy away from difficult tasks, slacken their efforts and give up readily in the face of difficulties, dwell on their personal deficiencies, which detracts attention from task demands, lower their aspirations, and suffer much anxiety and stress" (p. 395). What is surprising, then, with the current study, is the small improvement in writing apprehension scores

between the pre- and post-administrations of the writing apprehension instrument in light of the extensive percentage improvement (statistically significant) in the tasks component of the writing self-efficacy scale and the smaller percentage improvement (also statistically significant) in the skills component of the overall writing self-efficacy scale. Research needs to be conducted to determine why writing apprehension is slow to disappear even though overall writing self-efficacy appears to change rather quickly, at least under certain conditions.

The data collected for this study clearly show the effect that absence of evidence to the contrary has on students' perceived writing self-efficacy. The data also clearly show the effect that evidence has on students' perceived writing self-efficacy. Students will likely overestimate the tasks component element of the overall writing self-efficacy scale, believing they could successfully compose a variety of different types of documents (tasks). On the other hand, when they receive frequent feedback regarding the quality of their writing skills, they are able to assess more accurately their efficacy of the skills component of the overall writing self-efficacy scale. Substantiating this claim is the fact that a negative correlation (although not significant) was found between the post-administration of writing performance and overall writing self-efficacy. Research needs to be conducted resulting in the preparation of a writing self-efficacy measurement device that assesses more of the writing tasks typically found in a written business communication course than are assessed by the writing self-efficacy scale developed by Shell, Murphy, & Bruning (1989). Developing such an assessment instrument is consistent with the admonition of Pajares & Miller (1994) that the assessment of self-efficacy "must correspond directly to the criterial performance task" (p. 194).

Bandura (1986) states that "attempts to boost perceived self-efficacy persuasively often take the form of

evaluative feedback about ongoing performances" (p. 406). He states that persuasory efficacy appraisals tend to become more believable when they slightly exceed "what individuals can do at the time because better performances are achievable through extra effort (p. 406). Consequently, if students are persuaded they can succeed, they are more likely to expend the effort to do so than if they are confronted with uncertainties. However, Bandura (1986) delivers a cautionary note: "Inflated persuasory appraisals that mislead performers to failure quickly undermine the evaluative credibility of the persuaders" (p. 406). Although no special effort was undertaken by the researcher to provide what Bandura refers to as "persuasory efficacy appraisals," research needs to be conducted to determine what effect different types of persuasory feedback may have on overall writing self-efficacy of students in written business communication. Ample evidence exists that not all types of writing feedback systems are seen by students as being equally useful (Straub, 1997; Pearce & Ackley, 1995; Van Horn-Christopher, 1995; Winter, Neal, & Waner, 1996; Quible, 1997). The impact of various writing feedback systems on the overall writing self-efficacy of business writing students also needs to be researched.

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TEACHING INFORMATION TECHNOLOGY IN A BUSINESS CLASSROOM: PERSPECTIVES FOR THE 21ST CENTURY

Timothy R. Kayworth

Abstract

The traditional view of information technology (IT) as a support function has changed dramatically. With advances in telecommunications, networking, computing power, and powerful business software, many companies have begun to view IT as a potential source of competitive advantage. It is imperative that these changing dynamics of the business environment are reflected in the way we both view and teach technology in the classroom. Porter's Competitive Forces Model is utilized as a framework for identifying those technologies most relevant to business education as we approach the 21st century.

Introduction

Recent advances in telecommunications, networking, computing power, and user friendly software have begun to change the way many companies both view and use information technology (IT). Companies like Fedex (package

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tracking system), Otis Elevator (Otisline support center), WalMart (real time inventory control system), Dell Computers (mass customization), Charles Schwab (on-line stock trading), and Amazon Books (Internet-based book purchases), are a few of many companies who have achieved higher levels of competitive advantage through the creative application of information technologies.

Other companies such as Scotia Capital Markets (Laudon & Laudon, 1996) have begun to engage in electronic commerce through the Internet to "connect" themselves with external customers, suppliers, and business partners through corporate extranets. Consequently, the traditional view of technology as a support tool has changed. Today, many companies have begun to view the role of IT as an enabler of strategic change with the potential for long term benefits.

The Role of Technology

Consequently, business educators must begin to re-think the way they teach information technology to be more consistent with the notion that IT can be used as a strategic "weapon" in organizations to help firms revolutionize the way they develop, market, and service their products. Table 1 compares three views of information technology and suggests how each of these views influences classroom instruction.

A central argument here is that the third perspective, the strategic potential of IT, should be the predominant view in today's classrooms. This argument is illustrated by the case at Claims Solutions Group, where IT became not just a productivity tool, "...but a way to completely change the way the (unit's) business was done, with significant increases in customer satisfaction and business value (Groenfeldt, 1997)."

Table 1: Perspectives on the Role of Information Technology

IT Perspective	Description	Implication for Classroom Instruction
Automation 1960's-1970's	Information technology is used primarily to automate routine office accounting and inventory control function. The main "payoff" is in terms of labor cost savings.	Technology centered instruction focuses primarily on how to build efficient data processing systems in a centralized IT management environment.
Business Process Redesign 1980's	Information technology is used to redesign existing business processes.	The focus is on teaching students how to analyze <u>existing</u> business processes and how to apply information technology to dramatically improve the efficiency of these business systems.
The Strategic Potential of Information Technology 1990's and beyond	Information technology can be used as a strategic tool to transform how companies deliver goods and services to customers.	A dual focus on both business and technology is necessary where students are taught (1) a framework for understanding the competitive forces at work in the business and (2) the need to recognize the value of emerging technologies applied to specific business needs.

Thus, the extensive use of information technology at the firm level supports the contention that IT may be the most important development in the management of organizations since the pre-World War II dawning of the modern corporation (Veiga & Dechant, 1997). These contentions provide strong support that business educators should focus their efforts on teaching students to think of IT as having the potential to impact firms in a strategic fashion.

The Competitive Environment

This strategic view of information technology has two requirements, as indicated by Table 1. First, students must be given a framework for analyzing the competitive forces at work in specific business contexts. For example, if students were to analyze the competitive environment of the IBM Corporation, this would require an understanding of both the internal business environment (e.g. products, services, business processes, corporate culture) as well as an awareness of external forces related to outside competition, government regulation, and economic climate. Second, students must be given a basic understanding of the capabilities of new and emerging technologies. This combination of business knowledge combined with a keen understanding of information technology capabilities teaches students how to recognize opportunities to apply enabling information technologies within specific business settings.

This approach assumes that business knowledge (internal and external) combined with knowledge of key technology capabilities is essential to recognizing opportunities to apply IT in a strategic fashion (Figure 1). A major implication of this approach is that information technology should not be taught in a vacuum; rather, it should be taught in the context of real world settings where students are challenged to understand both the business challenges as well as the opportunities provided by technology to address these

challenges. Consequently, educators need to teach students how to recognize strategic business opportunities and the role that information technology can play in exploiting these opportunities.

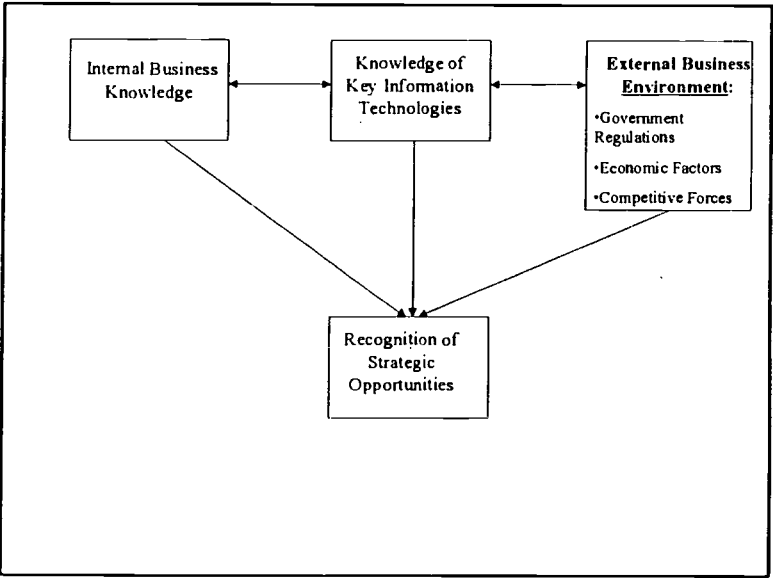


Figure 1: Recognizing the Strategic Value of IT

Porter’s Model may be utilized as a framework for teaching students how to understand the competitive forces at work within a given business segment or industry. The ability of students to conduct a competitive analysis is essential to their ability to target specific areas to apply information technology for competitive advantage.

Porter's Competitive Forces Model

Porter's five-force model of competition (Figure 2) identifies key areas of competitive pressure affecting all firms (Porter, 1980; 1985). These competitive forces are the threat of new entrants, rivalry among competing firms, the threat of substitute products, and the bargaining power of customers and suppliers. Each of these forces poses a significant threat to the industry's profitability potential and to the individual firm's ability to earn average or above average returns.

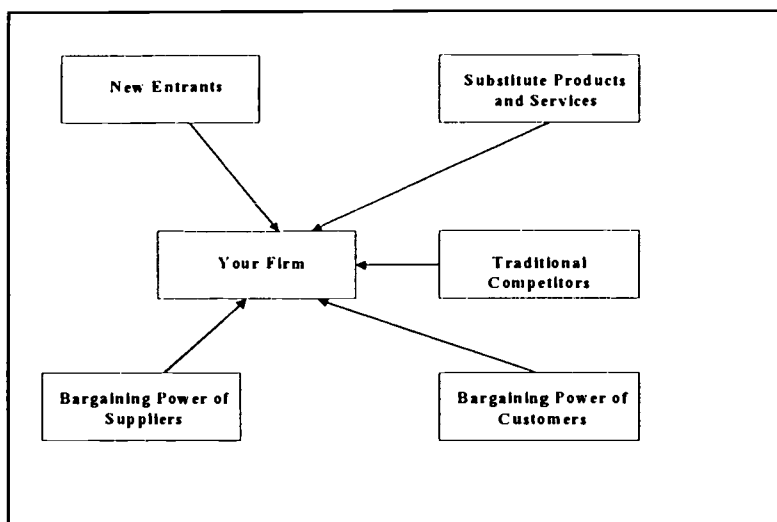


Figure 2: Porter's Competitive Forces Model

To counter the effects of these forces so they can achieve and maintain competitive success, organizations select a business strategy. The essence of a business strategy is to denote the set of choices the firm intends to make so it can either *perform different activities* or *perform activities differently* as compared to rivals. The combination of activities to be

completed as demanded by its selected strategy should allow the firm to deliver greater value to customers or to create comparable value at a lower cost, or both (Porter, 1996). Thus, at its core, business strategy is a reflection of how the firm intends to create value (Campbell & Alexander, 1997). To create value, a business strategy is concerned with several key issues, including those of defining a company's position, making trade-offs among competing demands, and developing linkages among the activities that must be completed in order for the selected strategy to be implemented successfully.

Porter suggests several strategies that companies may engage in to "combat" these competitive forces: product differentiation, low-cost producer, and focused differentiation. Table 2 below describes each of these strategies with examples of how information technology has been used to achieve each of these business strategies.

In each of these examples, information technology has been used in a strategic fashion to accomplish one of the four generic competitive strategies noted by Porter. Use of this framework helps to identify areas of competitive strength or weakness that firms need to address. Once firms recognize specific areas of competitive weakness, they can look to information technology as a potential opportunity to address these areas. When applied in an academic setting, this competitive analysis approach helps students in two areas. First, it gives students a framework for understanding the competitive forces at work within any given firm's environment and the array of potential strategies that may be used to "meet" these forces (see Table 2). Second, this approach helps students to identify specific areas where information technology might be applied in a strategic fashion to help firms meet these competitive pressures. This approach is useful because it trains

Table 2: Competitive Business Strategies

Business Strategy	Description	Examples
Product Differentiation	Changing the actual product or the way it is delivered or serviced	Charles Schwab on-line stock trading
Low Cost Producer	Competing with other firms through offering products and services and the lowest prices	WalMart's inventory replenishment system
Focused Differentiation	Competing in a narrowly defined target market to discourage new market entrants	Analysis of Sears customer database has resulted in the new "Come See the Softer Side of Sears"

students to think of information technology in terms of its strategic potential as opposed to the more traditional view of how it might be used to merely automate existing processes.

As noted above, students must be able to understand the business (competitive) environment in which firms operate in order to understand how to apply information technology in a strategic fashion. The second part of this "equation," as noted in Figure 1, is the ability of students to recognize the capabilities of current and emerging technologies. The following section provides a brief outline of some of the key technologies that business educators need to focus on as we approach the 21st century. When combined with understanding of the specific business contexts, an understanding of these

key technologies will enhance the ability to recognize opportunities to apply information technology in a strategic fashion.

Key Trends in Information Technology

Given recent trends in the business environment, the following information technologies appear to be most critical for those firms who wish to gain a competitive edge as we enter the 21st century. While it is not expected that every firm will implement these technologies, it is imperative for business managers (as well as business students) to have a basic understanding of what these technologies do and where they might be applied in firms.

Electronic Commerce.

While the Internet has been available for several years, many companies use this technology primarily as a sophisticated "business card" to provide information about their products and services. Electronic commerce moves beyond simple informational web pages to allow companies to actually transact business over the Internet with various stakeholders that include customers, suppliers, and other business partners. Thus, electronic commerce provides capabilities for firms to buy, sell, and pay for products over secured Internet sites. Security First Network Bank provides an example of how one of the world's first virtual banks has leveraged technology for competitive advantage. Through electronic (e.g. Internet) banking, they have significantly reduced their transaction costs, thereby becoming a low-cost producer. Second, product differentiation has been accomplished through providing a wide array of on-line banking services not currently available through traditional banks. The emergence of electronic commerce has significant implications for how whole industries operate. As Whinston & Kalakota (1996) note, "technology has enabled the creation of new market opportunity that enables new players to

step in, creating a whole new set of market dynamics (p. 11)." Many experts believe that electronic commerce will have dramatic impacts on industries related to banking, retailing, publishing, and manufacturing. Therefore, it is essential for business educators to give students a wide exposure to electronic concepts.

Data Mining.

Many firms have collected massive amounts of data over a period of years and have just begun to realize the value of this data that often consists of years of sales and customer transaction data. Firms have begun to "mine" this data using sophisticated analysis techniques such as neural networks. Peacock (1998) comments, "narrowly defined, data mining is the automated discovery of interesting non-obvious patterns hidden in a database that have a high potential for contributing to the bottom line. Data mining has many potential uses in marketing, including customer acquisition, customer retention, customer abandonment, and market basket analysis (e.g. customer buying habits) (p. 1)." Thus, data mining efforts may help firms to engage in focused differentiation strategies by providing a better understanding of trends, relationships, and hidden patterns in their corporate data. Through understanding their corporate data, firms are better able to target or focus their marketing efforts on those demographic groups that are most likely to purchase products.

In one high visibility example, Sears has used the data mining concept to re-define their core business as "Come See the Softer Side of Sears." Through sophisticated data mining techniques, Sears was able to conclude that contrary to popular thought, men's purchase of tools and hardware did not comprise Sears' major segment of business. In contrast, women who purchased appliances and clothing items were found to be the most significant segment of the business. As a result of these findings, Sears re-directed their approach. It

is important to note that these strategic changes were enabled through the use of information technology applied to data mining techniques.

The *Wall Street Journal* recently reported that: "The Palo Alto Management Group, an industry research firm, estimates companies will spend \$73 billion on hardware, software, and services related to sorting out customer data in 2001, up from \$10 billion today. The payoff will be a much faster return on investment when more of the right customers are hit (Peacock, p. 4)."

Geographic Information Systems.

Geographic information systems (GIS) have been traditionally used in the realm of the natural sciences (e.g. weather, geography, geology) as well as land use planning (e.g. zoning, environmental planning). However, more and more firms are beginning to recognize the strategic value of GIS as applied to business settings. GIS software presents and analyzes data geographically, tying business data to points, lines, and areas on a map (Laudon & Laudon, 1996). For example, the Sonny's Bar-B-Que chain out of Gainesville, Florida, used a GIS to conduct site analysis for new franchise locations. The GIS allowed them to overlay demographic data (income, age, consumption habits) in a graphical form over pre-defined geographic areas (e.g. a metropolitan area) to assist in decision making for new site selection. Through this technology, Sonny's has been able to engage in a focused differentiation strategy to provide services to a narrow target market much more effectively than their competitors.

Enterprise Resource Planning

Traditionally, companies have evolved their core business systems over time, developing and maintaining key applications related to inventory control, accounting,

manufacturing, sales, order entry, and distribution. In many cases these systems have evolved over a period of years and lack integration. In the past several years, enterprise resource planning (ERP) has become possible through the availability of large scale integrated software systems. The most notable of these is the German based company SAP A.G., which offers a fully integrated, large software system that allows customers to integrate manufacturing, distribution, logistics, sales order entry, purchasing, as well as a full range of accounting functions. The SAP product has versions available for both mainframe (R/2 version) as well as the client-server (R/3 version) that handles multiple foreign currencies as well as multiple languages. The use of ERP software may help firms to achieve higher levels of competitive advantage through lowered costs achieved by ERP enabled business process redesign. Consequently, ERP technology may be strategically applied to implement the low cost producer strategy. Other key players in the enterprise-wide market include PeopleSoft and Oracle, who both offer similar packages.

While these fully integrated packages offer unprecedented opportunities for companies to implement fully integrated large-scale applications, the problems associated with implementing these systems are significant. There has been a severe shortage of consultants who are able to manage the ERP implementation process. In a December, 1997 issue of *ComputerWorld* magazine, William Spain refers to SAP as the "killer skill" in the IT industry. He comments, "for the past two years, SAP has been the skill of choice for a relatively small fraternity of SAP AG consultants. While demand for their services is still strong, those who want to make the big bucks don't have to opt for the consultants' hectic lifestyle anymore. There's plenty of work for the next generation as permanent SAP staffers." In this article, Spain goes on to note that SAP consultant salaries range about 39% higher than other consultants.

Internet-based Software Applications.

New software development tools allow developers to build applications that reside on the Internet. The benefit of this technology is that customers, suppliers, or other business partners can interface with a corporate database simply by logging onto the Internet through a secured password. This type of information technology may revolutionize the way organizations communicate with customers. For example, a web-based application could allow a customer to log into a company's computer via the Internet and check account balances, credit limits, and transaction descriptions. By providing these enhanced capabilities, firms are able to pursue a strategy that allows them to differentiate products and services to become more attractive to customers and key business partners. This technology has strategic implications for banking and financial services businesses.

Conclusion and Implications for Business Educators

Current demands of the marketplace suggest that when applied properly, information technology can be used as a tool to "leverage" a firm's competitive position within an industry. The major argument of this paper is that IT has grown to such a level of importance, that the firm's ongoing viability may depend, to a great extent on their ability to recognize strategic opportunities in the marketplace and then to identify enabling technologies to exploit those opportunities. The ability to do this has become extremely important given the rapid pace of business combined with the globalization of business markets. In effect, the world has become much smaller and firms need to respond much more quickly to changes in their environment. In this paper, information technology has been viewed as a strategic tool that can help to achieve these goals.

Given this notion of IT as a strategic enabler, there are several key implications for business educators regarding how

to teach information technology concepts in business programs. Table 3 identifies these concepts and provides some practical suggestions for how educators may incorporate these ideas into classrooms settings. When applied, these suggestions for practice should provide business students with a richer and more relevant view of how information technology is being viewed in corporate settings.

Table 3: Implications for Business Educators

Information Technology Concept	Suggestion for Business Education	Expected Outcomes
More than ever, IT is being applied in a strategic fashion to enhance the competitive potential of the firm.	Teach students how to analyze the competitive environment by having them analyze specific firms using Porter's Competitive Forces Model.	Students will learn how to recognize opportunities in the business environment.
There is a wide range of information technology available in the marketplace that can be applied creatively in a variety of business contexts.	Expose students to those information technologies that you consider to offer the greatest potential for impacting organizations in a strategic manner (e.g. electronic commerce, GIS, Data Mining, ERP, Internet Applications).	Students will learn how to recognize technological solutions to be applied to strategic opportunities.

Table 3: continued

Information Technology Concept	Suggestion for Business Education	Expected Outcomes
Information technology does not exist within a vacuum.	Teach information technology concepts within the context of real-world business settings through the use of case studies, speakers from industry, and examples of technology use from current literature.	Students will learn that technology use needs to be linked with business goals and objectives. Success with IT is dependent on the degree in which IT helps achieve business goals and objectives.
Information technology is an evolving and rapidly changing field.	Encourage students to stay current with IT literature through reading current industry news regarding new and emerging technology developments.	Students will develop a "filtering" system to identify new enabling technologies to be applied to business settings.

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AUCTIONS, AGENTS, AND CONSUMER ADVOCACY: ELECTRONIC COMMERCE ISSUES FOR BUSINESS CURRICULA

Jo Ann Oravec

Abstract

Electronic commerce on the Internet has developed beyond the "novelty" stage to become a major form of economic exchange worldwide. Business classrooms can provide a place for exploration and experimentation with on-line services. Teachers and students can also serve as consumer advocates in these realms, helping to mitigate some of the current and potential hazards associated with electronic commerce. Each of the electronic commerce advances discussed in this article can provide challenging and involving classroom activities in both high school and college settings. However, each also opens new social issues, including concerns about privacy, consumer fraud, and the manipulation of children and the elderly.

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Electronic commerce has expanded beyond the experimental stage to the point that it is part of the everyday lives of many consumers. Electronic commerce introduces a wide spectrum of choices and new hazards into the everyday shopping experience. Included under the rubric of electronic commerce today are such activities as on-line marketing and purchasing, as well as the distribution of digital information products (including music, video, and newsletters). Businesses use electronic commerce capabilities to exchange product information and purchase orders with each other. Estimates of the size of the market for electronic commerce vary greatly, depending on what is considered under the category. The Clinton Administration's 1997 report, "A Framework for Global Electronic Commerce," speculated that commerce on the Internet could amount to tens of billions of dollars in the next few years (White House Report on Internet Commerce, 1997).

This article explores several modes through which these electronic commerce advances can be introduced into business classrooms. There are many opportunities for students to participate directly in on-line shopping and other electronic commerce activities, with little or no expenditure (except for basic Internet access). Critical and reflective approaches to these activities in the classroom may equip students to become effective "change agents," introducing these advances in their organizations and working to minimize their potential problems. Business classrooms (both at high school and post-secondary levels) are ideal settings for evaluating electronic commerce technologies and assessing the social and economic issues associated with them. Whether or not they will be directly employed in electronic commerce enterprises, many of today's business students will soon be faced in their working lives with the problem of how to present innovative services to consumers, as well as participating in the development of new ones. In doing so, they are indeed playing the roles of change agents in their communities as well, introducing shoppers to new forms of interaction with commercial organizations.

Emergence of Electronic Commerce

Those with products and services to sell use the Internet to learn about potential markets and to publicize their wares, with the World Wide Web as a primary medium. Customers, in turn, find some effective means on-line for obtaining information about products as well as for communicating with sellers. Customers with questions can readily query organizations via electronic mail, providing a new channel for feedback about products and services. However, these advances are not without drawbacks. Information collection on the Internet has raised a number of important issues about privacy and security, especially when the collection of information from children and the elderly is involved. According to groups such as the Center for Media Education, children who surf the Internet are being drawn into revealing information about their households by marketers (Pasnik, 1997). The US Federal Trade Commission (FTC) has been concerned about the potential for the Internet to proliferate scams that prey on the elderly and the unwary (Mannix, 1998).

Recent advances in electronic commerce have expanded the models for commerce itself and provide an ever-increasing range of activities for consumers. Rather than just duplicating what can be done in traditional modes of commerce, electronic commerce developers are pioneering new means to connect buyers with sellers. For example, some on-line marketers (such as Cybergold) pay consumers to view particular ads. Cybergold also provides listings of dozens of on-line activities, contests, and promotions in which small sums of money can be earned by Internet surfers; students can easily join Cybergold and experiment with these offerings (Bland, 1997). Other services make it easier to view prices and options for computer equipment and other products on the Internet. ComputerESP compiles over a million prices from major computer cyberstores in the United States and Canada; on average, they update over

500,000 prices a day. Users of ComputerESP (a free service on the web provided by U.Vision) have access to these prices simply by entering search terms (either keywords or categories) into its website.

Consumers also use services such as Firefly to obtain information from each other on-line about products in a way that greatly augments traditional "word-of-mouth" communication. In this innovative strategy, consumers construct "profiles" of their needs and interests by completing on-line surveys. The profiles are then matched with those of other consumers. Information about the likes and dislikes of the consumers whose profiles match are subsequently shared, and people with similar interests are linked (Power, 1997). In 1997, Firefly had already enrolled 2.7 million members in its system; in 1998, Firefly was acquired by Microsoft Corporation. Many of these new on-line activities are indeed complex and require some active educational efforts on the part of their designers and promoters. Students can use Firefly and other on-line services in business classes as examples of electronic commerce innovations, comparing results with each other and critiquing the overall "user friendliness" of the services.

Critical Thinking Parameters in Electronic Commerce

The Internet and computer networking in general have been beneficial tools in the classroom in the past decade, allowing access to reference materials and other resources that would be hard if not impossible to locate in a timely fashion. The Internet is now the center of an even broader range of classroom activities in business curricula as students and teachers shop (or at least "window shop") in markets worldwide and utilize various means for locating items and making purchasing decisions. Students can also gain experience in starting and advertising businesses on-line, building free (or

relatively inexpensive) websites through the facilities provided by GeoCities or Angelfire (Quittner, 1998).

Current circumstances in Internet-related commerce have many parallels with situations early in this century in retailing. Retailers worked to acquaint shoppers with the realm of mail-order products, and home economics and business education teachers helped to introduce mail order channels to young consumers. Some early writings also had an influential role in consumer advocacy: for example, Your Money's Worth by Chase and Schlink (1927) provided specific strategies for consumers in how to avoid fraud and wasteful spending. Those pioneering retailers, teachers, and writers faced substantial challenges. Consumers needed to be informed about the specific procedures for making mail order purchases. They also needed to be encouraged to form new kinds of relationships with the companies with which they were doing business: they had to learn to evaluate their trustworthiness, then establish and maintain relationships with them.

Trust is also an important element in the age of the Internet. With electronic commerce, consumers must evaluate the integrity of the companies with which they are doing business to give them the products they ordered. Also, they must evaluate how trustworthy these companies are to handle their personal information (such as credit card numbers) with privacy and security. Consumers must also watch out for scams and for potential security breaches. Business teachers (along with their students) can also serve as "consumer advocates" in this new electronic realm, helping to identify and publicize problems before the average consumer is affected by them. Consumer "scams" are indeed growing on the Internet, as everyday consumers begin to spend their time and money in on-line shopping. Mannix (1998) wrote in Newsweek that "a new generation of hucksters has made the Internet the latest tool for carrying out all sorts of schemes" (page 59). One of the organizations that has tackled the issues of consumer fraud

on the Internet and provide useful information to teachers includes the Internet Advocacy Center, a program of the California Alliance for Consumer Protection. The Center is a clearinghouse for information about electronic commerce and also helps to investigate consumer complaints.

Teaching Consumers About On-Line Advertising, Contests, and Gambling

Having a website in itself does not ensure that it will be visited by others, much less viewed with the attention needed to make purchasing decisions. Most students who have constructed websites with the means to count visitors learned some hard lessons about attracting web surfers. New forms of advertisements are being developed and sold on the World Wide Web, as well as new ways of connecting individuals with ads they might be interested in. There are a number of on-line "yellow pages" that provide the opportunity for organizations to link their website's URL to their yellow page listing (Weber, 1998, May 14). BigBook provides not only "traditional" yellow pages listings but also constructs Web sites for small businesses and directly sells products on its own homepage (Kennedy, 1998). A group of students at UW-Whitewater undertook the project of advertising a university website (for the University's new On-Line MBA Program), utilizing various yellow page services and other strategies.

A major objective of website development is to attract visitors to one's site and then "keep them coming back" for more visits over time. Contests, lotteries, and other games of chance are becoming popular ways to do this. Many media specialists have worked in past decades to infuse risk-related or lottery-like inducements into product packaging and promotions by providing simple choice situations that invite consumer participation. Information as to whether one has won a prize is placed on the inside of lids, wrappers, or bottle caps. Thus, by the very act of consumption, one is injected into the contest.

Games of risk have broad appeal, regardless of the intellectual or social levels of their participants; they have rapidly found a place in Internet design initiatives. A good amount of expert advice is available as to how prizes can be infused into web sites in order to attract and occupy users (see, for example, Bayne, 1997). Such contests are often coupled with questionnaire collection efforts, as users trade their personal information and a few minutes' time for a chance to win a prize.

Injection of contests and lotteries into a full range of Internet activities (from just logging on to making a purchase on a web site) can be expected in the near future, as commercial enterprises seek ways to attract and keep the attention of potential customers. Many communications and media specialists are being advised to inject some contests or risk into corporate websites if only to appear to have intentionally engaging and participative elements. Unfortunately, various forms of gambling (from betting pools on football to casino-style gambling) are readily available on the Internet. Some of these are being run outside of the United States, which gives US authorities little ability to control them. With the influx of on-line gambling sites has come serious social and moral issues: these gambling opportunities place many individuals in great financial peril, with no intermediary agent (such as a human ticket agent) involved to provide assistance or support.

Banners are often used to advertise various contests and lotteries, enticing viewers to drop what they are currently doing and attempt to win a prize. Most of us who have spent time accessing the Web have become all too familiar with banners--the small rectangular ads that reside on the screen alongside of the content we access. Banners generally have some element of animation, with a sequence of panels that is designed to attract our attention or even tell a story. Today, some banners are becoming interactive as well, allowing us to enter information and obtain specific output. As described in

an upcoming section, Internet surfers who do not want themselves or others in their workplaces or households to view these enticements have the option of installing software that blocks banners.

Internet Malls, Computer Agents, and On-Line Auctions

People rarely "stumble" upon interesting web sites--and search services can be confusing and deliver an oppressive overload of information. Organizations must thus find means of making their web sites more accessible to potential customers. There are several models that organizations have used to attract people to their web sites, including the formation of "malls" and the use of computer "agents." Internet malls work on a strategy similar to that of physical malls, with groups of organizations "virtually" clustering their web sites together--with a central site organizing a number of links. Internet malls have a wide assortment of themes, including some related to apparel, computer equipment, and international products. Some malls attempt to incorporate social interaction into the on-line shopping experience. The virtual mall "Project New York," now in development, lets users located anywhere in the world visit the same store, look at the same clothes and comment on them to each other, relaying messages back and forth on a "chat" segment of the computer screen (Rose, 1998, May 14).

Computer agents that specialize in shopping can also draw people to sites that might have products and services of interest to them. Agents (such as Waldo the Web Wizard of Andersen Consulting) develop a profile of their users' interests and then recommend a number of product- or service-oriented web sites that the users might find useful. Waldo asks a user a stream of entertaining questions, constructs a profile of the user from the answers, and delivers a list of web sites that match this profile. The user can then visit these sites and see whether they are in synch with his or her interests. Computer

agents will soon be of great value for both consumers and businesses in understanding markets. The profiles created by the agents hold rich information about their owners, information that many corporations find of value; in turn, the agents communicate important information about markets to their owners (Oravec, 1996). Teachers will find agents of special value in introducing students to basic notions about computer applications and about the value of personal information collection as well.

Marketers are developing other ways to capture the interest of customers on-line, ways that have the potential for high entertainment value as well as the stimulation of commerce. For example, participants can bid for items in on-line auctions; some airlines are even arranging auctions so that travelers can place bids for otherwise empty seats (as in PriceLine or Cathay Pacific's CyberTraveler Auctions). Such opportunities are of course implementable in non-computer-based contexts, but not with the ready availability that Internet efforts can provide. This availability has drawbacks as well as benefits; without "tired feet" and heavy shopping bags to slow them down, some shoppers may become "addicted" to these services (Young, 1998).

Keeping Track: Information Collection About Consumer Activity

Electronic commerce research and development efforts in business are spawning an assortment of innovative research methodologies with which marketers can better understand their customers and potential customers across the globe. Over the years, marketers have collected information from individuals through surveys, face-to-face interviews, and observation. Today, many of those marketers are utilizing electronic commerce to understand customers. As customers "surf the web," they collect information about products and services—and through marketers' collection of information

about their visits they can provide revealing data as well. What sites do customers find of interest? Which ones do they visit again? Markets that may seem too small or too distant for businesses to be concerned about are also becoming more accessible and comprehensible through such electronic commerce tools as on-line focus groups and surveys.

On-line "focus groups" are increasingly being used to obtain information about current and prospective consumers. For example, on-line assemblages of young people have become a popular way for marketers to glean responses about various products and services. Liquor manufacturer DeKuyper organized focus groups of college-aged individuals to determine their tastes in hard beverages (Restaurant Business Magazine, 1995). International marketing efforts can especially benefit from on-line focus groups; groups of individuals in other nations can be gathered in a manner that would not have been economically feasible before the advent of the Internet. On-line surveys and focus groups can provide a number of valuable classroom exercises in marketing research. Students can participate in activities designed by business organizations or construct their own on-line questionnaires.

Marketing researchers have undertaken a number of initiatives to understand how best to determine the prices of on-line ads and banners: those who buy the ads want to know how many individuals are viewing them, as well as the approximate socio-economic status of those individuals (Thomas, 1998). Many of the organizations that are pioneering in the development and delivery of these ads (such as DoubleClick) are becoming widely-known to businesses worldwide. Use of software that blocks banners from appearing on users' screens has complicated the issues of advertising on the Web, however. Just as "channel surfers" can quickly change channels when an ad emerges on the TV screen, certain kinds of software can block advertisements (specifically, banners) from computer terminals. For instance,

Cybersitter (by Solid Oak Software in California) has this option along with its capabilities for blocking certain websites and even specific words. Blocking software can thus interfere with the marketing strategies mentioned above: if a large number of people choose to block out advertisements, marketers will not have a sense of how effective their advertising is or even whom it is reaching (Dalton, 1998).

Website development and web contest prizes are expensive and must be paid for by the organizations that create them. Advertising of course is one means of obtaining this revenue, but it is not the only one. Marketing researchers are also working to devise strategies for directly charging for access to sites on the Internet or to specific on-line activities (such as gambling or gaming). The strategy of charging for every transaction or website access has been seriously proposed (Herzberg and Yochai, 1997). However, few services have had success as yet in charging for access to websites. In a widely-publicized example, the on-line magazine Slant was promoted as a subscription-supported service. Microsoft Corporation heavily funded political pundit Michael Kinsley's efforts to create an Internet product that industry professionals as well as the public-at-large would consider "worth paying for." However, Slant has not yet attracted a large number of subscriptions, only 10,000 as of March 1998 (Mitchell, 1998).

The failure of Slant and other on-line content delivery initiatives to obtain large numbers of subscriptions is generally blamed on the wide availability of free Internet offerings ("free" of course to those who pay basic Internet access fees and accept the fact that they will view a fair share of advertisements along with the content they desire). An exception to this trend is the Wall Street Journal Interactive Edition, which had more than 150,000 subscribers in the spring of 1998 (with the cost of \$49 a month, \$29 for those who subscribe to the printed Journal) and is widely considered as a "successful" subscription service. The question of how to

charge for computer network activity may involve matters of perception on the part of users: if they are indeed assessed for their entry to every website on one account, the monthly bill could seem enormous and unsettling. However, having to pay many small bills for subscriptions to individual on-line services could be frustrating and time consuming.

Conclusions and Reflections: Helping Consumers Make Informed On-Line Choices

Along with "computer literacy," high school and post-secondary teachers are beginning to introduce electronic commerce concepts in their business school classrooms, such as the efforts spearheaded by the Center for Digital Commerce at Georgia State University (Silver, 1998). Corporations are also involved in these basic education efforts: in 1998, Excite and MasterCard International entered into a strategic marketing alliance focused on increasing consumer awareness of the benefits of on-line shopping. An array of innovative shopping activities and related concepts are emerging. On-line shoppers may participate in services that pay them for looking at ads; they may also use agents such as Waldo the Web Wizard to help direct them to the products and services they desire. Rather than buying an airline ticket with a fare assigned by the airline, they may participate in auctions with thousands of others for empty seats. Business students can themselves become part of the development of these new modes of exchange by participating in them directly, then attempting to characterize them in ways that make them more accessible to varied audiences. In this way, they will learn about the genesis and development of new forms of commerce and economic activity.

Whatever one concludes about the future of electronic commerce, it is hard to deny that consumers are being given increasingly wide ranges of choice. A choice-saturated world would seem to be a complex and confusing realm, not a

desirable place for those who shop for recreation or everyday necessity. Some scholars have identified syndromes in which a surfeit of choices plays a role: for example, Roszak (1989) strongly criticizes the choice-saturated environments that our society presents. In Future Shock, Toffler (1970) outlined the dangers of "overchoice," in which "the advantages of diversity and individualization are canceled by the complexity of the buyer's decision-making process." Developers of on-line services are spending increasing amounts of their time in inventing means to assist people in making choices and in locating products and services--including programmable intelligent agents that provide search and selection functions based on users' needs. When engaging in electronic commerce activities, consumers indeed have a number of new, powerful tools that can aid them in making sense of the many on-line options and activities they are offered. Many shoppers are being informed about these electronic commerce options through press releases, advertisements, and their own "web surfing" expeditions. However, there is still a great deal of confusion about what the services offer; business teachers and students can explore ways of explaining and introducing the basic concepts behind these services as part of their classroom activities.

Intel's Andy Grove (1996) wrote of the problem of "renting eyeballs": there is a great deal of competition for the attention of viewers worldwide, with the Internet just one source. Participants who are not satisfied with electronic commerce can easily go elsewhere to find consumer information and to buy specific items. They can turn to television (for example, the Home Shopping Network), to catalogues, to print media, and even to the mall. The new on-line services described here provide visually attractive and carefully designed attempts to gain and maintain the attention of potential customers. For example, there is a variety of on-line contests, games, and promotions available that engage customers in stimulating (as well as lucrative) activities at any

time of the day or night. However, the services discussed in this article are still facing stiff competition from more entrenched and familiar forms of commerce. Thus, the shape of the shopping realm to come is still uncertain. It is certainly an exciting age in the history of commerce, and all of us can play some small role.

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RECYCLING PERCEPTIONS AND PRACTICES OF OFFICE EMPLOYEES

Melody W. Alexander

Abstract

The purpose of this research was to identify office employees' recycling perceptions and practices. A total of 306 office employees completed a questionnaire that included employee demographics, company demographics, and questions on recycling perceptions and practices. Findings revealed statistically significant differences between recycling practices and company size.

Recycling is becoming a common practice in the business today (*Knight-Ridder/Tribune Business News*, 1994; *Training and Development*, 1994). Many manufacturers in the United States are making environmental practices such as recycling a part of policy (*Business Week*, 1995). Companies are finding that recycling can reduce costs, decrease the use of diminishing landfill space, and uphold the environment (Curry,

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1993; Frazier, 1995). Through waste reduction policies, companies gain both financial and public relations benefits (Boulton, 1996).

Amdahl Corporation implemented a recycling program involving the resale of paper products, scrap metals, and furniture. The company earned \$1,136,546 from their recycled materials in 1994, while the cost of the program implementation was only \$89,979 (Buildings, 1995). As demand for recyclable waste products increases, many others are expected to participate in similar programs (Graham, 1996).

In 1992 a directive was signed that required all federal agencies to use paper that contained at least 20% recycled content (Banham, 1994). The United States government purchased \$313 million worth of recycled-content goods in 1995, up from \$242 million in 1992 (Stack, 1996). To assure that recycling programs will continue to develop at the state level, the government is funding programs (Polk, 1995). The U.S. Post Office recycles junk mail into toilet paper (Graebner, 1995).

Conferences are currently being implemented throughout the country to examine present recycling practices used by companies (Beeson, 1994). Businesses have begun to employ recycling coordinators to develop long-term recycling strategies (Stack, 1994). The paper industry has also benefitted from the increase of recycling programs (Sutherland, 1995). As demand is currently high for recycled paper, there is an expected increase in recycling programs (Simon, 1995). Between 1993 and 1994 old newspaper prices went up from \$30 a ton to \$100 a ton, while cardboard prices rose from \$30 a ton in 1993 to \$140 a ton in 1994 (Clark, 1994). Recycled papers are in such high demand, it was estimated that supplies will not meet the demand by the year 2000. Currently, only 36 percent of office waste paper is being recycled. To meet the demand, 67 percent of office waste paper will have to be

recovered and recycled (Will Supply Keep, 1995). Technologies are being developed to eliminate dyes, adhesives, and fluorescents from office waste paper so that a wider range may be recycled (Giltenan, 1996).

Paper recycling has received a great deal of attention because our nation's landfills are being flooded by an overwhelming amount of paper. In Curry's 1993 report, while accounting for approximately 55 percent of office building's waste, paper filled 41 percent of landfill space. Nevin (1992) found that companies who utilize recycling programs can reduce waste going to landfills by up to 60 percent. In 1995, Stack reported that recycling helped divert 45 million tons of waste from landfills. Many are hopeful these statistics will continue to improve, considering that U.S. companies consume more paper than any foreign counterpart (What Happened, 1994). Nevin (1992) reported that the average office worker in the United States was generating 3 pounds of waste products on a daily basis. Not only can businesses reduce the waste going to landfills but also they can save money in the process. Nevin further reported that prices have increased in regard to dumping waste from \$4 in 1982 to \$70 in 1992 in the Midwest. (1992).

Though literature on recycling is abundant, literature documenting recycling perceptions and practices of office employees is limited. An identification of recycling practices of office employees will provide employers and educators with a better understanding of their role in recycling.

Need for the Study

Future office employees will be dealing with an abundance of paper that needs to be controlled. The focus of office education programs is to prepare future employees to deal with changing issues. As office administrators, faculty, and trainers strive to provide relevant programs, knowing

current recycling practices will provide a realistic view of office procedures.

Statement of the Problem

Although the importance of recycling is clear, what is not clear are the recycling practices of office employees. Thus the problem identified in this study is: What are the recycling perceptions and practices of office employees?

To address this problem, a random national sample of 750 Professional Secretaries International (PSI) members were surveyed. The following research questions were investigated:

1. What are the office employees' perceptions and use of recycled paper?
2. What are the company's recycling practices?
3. Are there significant differences between office employees' perceptions of receiving external communications on recycled paper and demographic variables?
4. Are there significant differences between office employees' use of recycled paper products and demographic variables?
5. Are there significant differences between company recycling practices and company demographic variables?

Purpose

The purpose of this study is to identify office employees recycling perceptions and practices. The information will be useful to employers as they find ways to become environmentally responsible. Office educators and industry trainers will benefit as well, as they can integrate recycling issues in their office courses or workshops. An identification

of the recycling perceptions and practices of office employees will provide trainers and educators with a better understanding of their role in recycling.

Methodology

A questionnaire was developed to identify recycling perceptions and practices of office employees. In 1996-1997, the questionnaire was sent to office professionals, randomly selected from a national database of PSI members.

The content of the survey instrument was validated by a panel of ten office education faculty members who had been involved in an environmental issues workshop offered through the Department of Natural Resources and Environmental Management at a mid-sized, Mid-Western university. To ensure clarity, the questionnaire was completed by a group of twenty office employees. Changes were incorporated as necessary.

The questionnaire was sent to 750 PSI members, approximately four weeks later a follow-up mailing was sent to nonrespondents. Although 363 responses were obtained, 57 were from retirees who felt they should not participate. The remaining 306 resulted in a valid response rate of 40.8%.

Descriptive statistics were expressed in frequencies and percentages as appropriate. Cross tabulations were used to determine statistical significance and identify relationships between demographic factors and recycling practices and perceptions. The Pearson chi-square test statistic was used to determine statistical significance. A critical alpha of .05 level of confidence was used.

Findings

The findings of this study identified: (1) a profile of the office employees' personal and company demographics, (2)

employees' perceptions and use of recycled paper, (3) company recycling practices, (4) differences between employees' perceptions of recycled paper and variables, (5) differences between employees' use of recycled paper and variables, and (6) differences between company recycling practices and variables.

Office Employee's Personal and Company Demographics

Office Employee Personal Demographics. All 306 respondents were female. Age was fairly equally divided between those under 40 (30.1%), those between the ages of 40 and 49 (34.3%), and those 50 years of age and above (35.6%). Respondents indicated they had completed high school, had a certificate, or a college degree (26.3%, 41.1%, and 32.6% respectively). Most respondents had between 11 and 20, or between 21 and 30 years of office experience (35.2% and 31.6%). Approximately 15 percent (15.9%) had less than 11 years of office experience and about 17 percent (17.3%) had 31 or more years of office experience. The majority of respondents had worked in their current office position for less than 11 years (72.2%). The rest of the respondents indicated they had worked in their current office position for 11 to 20, or 21 or more years (18.6% and 8.9% respectively).

Office Employee Company Demographics. The majority of respondents worked in businesses located in areas with populations of over 20,000 (80.6%), worked for businesses that had been established for 40 or more years (64.7%), worked for companies that employed over 500 employees (58.8%), had 20 or fewer employees in their departments (65.0%), and had one- to-five office employees in their department (80.3%). (Table 1).

Table 1**Office Employee Company Demographics**

Variable	Frequency (N = 306) *	Valid Percent
Location of business (population)		
< 20,000	56	19.4
20,000-100,000	111	38.4
> 100,000	122	42.2
Age of business (in years)		
< 21	46	15.3
21-40	60	20.0
> 40	194	64.7
Number of employees in company		
< 100	56	18.3
100-500	70	22.9
> 500	180	58.8
Number of employees in department		
1-10	145	47.8
11-20	52	17.2
21-99	82	27.1
100 +	24	7.9
Number of office employees in department		
1-5	241	80.3
6-10	34	11.3
11 +	25	8.3

*Some respondents did not answer the demographic questions.

Office Employees' Perceptions and Use of Recycled Paper

The first analysis identified the respondents' perceptions in relation to receiving external communications on recycled paper and use of recycled paper in their offices. The majority (86.6%) perceived that it is good for the environment and created a positive image of the sender. Almost three-quarters of the respondents (221) indicated that they use recycled paper, yet less than 36 percent (109) reported they could use recycled paper for external communications. Over half (168) order paper products, and almost 70 percent (116) order paper products that have been printed on recycled paper. (Table 2).

Company Recycling Practices

In over 80 percent of the reported cases (262), office respondents reported that their companies do recycle. Respondents indicated that recycling bins were conveniently located (83.6%) and were clearly marked as to what should be put in them (71.8%). Over 70 percent (184) indicated that they had recycling facilities in their offices, and about two-thirds (173) had received written guidelines as to what can be recycled. Over half (152) knew a contact person to call for recycling questions, but less than 15 percent (35) indicated that their companies provided incentives for recycling. (Table 3.)

Differences Between Office Employees' Perceptions of Receiving External Communications on Recycled Paper and Variables

Office respondents were asked to indicate whether receiving external communications on recycled paper was viewed as positive or negative. When comparing perceptions of recycled paper with the demographic variables of age, education, years of office experience, and years in current

Table 2**Office Employees' Perceptions and Use of Recycled Paper**

Factor	Frequency (N = 306)	Valid Percent
Receiving external communications on recycled paper		
Good, creates a positive image	265	86.6
Nonprofessional, creates a negative image	41	13.4
Currently use recycled paper products?		
Yes	221	72.2
No	85	27.8
For what purpose? (N = 221) *		
Scrap paper	163	73.8
Internal communications	137	62.0
Rough drafts	115	52.0
External communications	58	26.2
Other	33	14.9
Company allows use of recycled paper for external communications		
Yes	109	35.6
No	197	64.4
Use recycled paper for external communications (N = 109)		
Yes	58	53.2
No	51	46.8
Order paper products		
Yes	166	54.2
No	140	45.8
Order paper products that have been printed on recycled paper (N = 166)		
Yes	116	69.9
No	50	30.1

* Respondents could check more than one category.

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116

Table 3**Company Recycling Practices**

Factor	Frequency (N = 306)	Valid Percent
Does your company recycle?		
Yes	262	85.6
No	44	14.4
Type of recycling (N = 262) *		
Paper	237	90.5
Cans	192	73.3
Glass	66	25.2
Plastics	57	21.8
Other	37	14.1
Recycling bins conveniently located (N = 262)		
Yes	219	83.6
No	43	16.4
Recycling bins clearly marked (N = 262)		
Yes	188	71.8
No	74	28.2
Recycling facilities in your office (N = 262)		
Yes	184	70.2
No	74	29.8
Received written guidelines on recycling (N = 262)		
Yes	173	66.0
No	89	34.0
Know a contact person to call for questions? (N = 262)		
Yes	152	58.0
No	110	42.0
Incentives provided for recycling (N = 262)		
Yes	35	13.4
No	227	86.6

* Respondents could check more than one category.

position, there was one area of statistically significant difference. Respondents who had been in their current office positions from 11-to-20 years were more positive about receiving external communications on recycled paper than any other category, as illustrated in Table 4.

Table 4

Differences Between Office Employees' Perceptions of Receiving External Communications on Recycled Paper and Variables

Variable	Positive % (a)	Negative % (a)	Chi-Square	DF	p
Age Range					
< 40	91.2	8.8			
40-49	87.5	12.5			
50 +	81.5	18.5	4.13	2	.126
Education					
High School	83.8	16.3			
Certificate/CPS	87.2	12.8			
College degree	87.9	12.1	0.73	2	.693
Years of office experience					
< 11	93.8	6.3			
11-20	88.7	11.3			
21-30	84.2	15.8			
31 +	87.9	17.3	3.72	3	.294
Years in current position					
< 11	84.4	15.6			
11-20	96.5	3.5			
21 +	81.5	18.5	6.24	2	.044*

(a) = Percent of Responses

*Significant at the .05 level.

Differences Between Office Employees' Use of Recycled Paper and Variables

Office employees' use of recycled paper was compared with the demographic variables of age, education, years of office

experience, and years in current office position. There were no statistically significant differences, as illustrated in Table 5.

Table 5

Differences Between Office Employees' Use of Recycled Paper Products and Variables

Variable	<u>Use recycled paper products? (N = 221)</u>		Chi Square	DF	p
	Yes % (a)	No % (a)			
Age range					
< 40	73.6	26.4			
40-49	75.0	25.0			
50 +	68.5	31.5	1.23	2	.541
Education					
High School	72.5	27.5			
Certificate/CPS	72.8	27.2			
College degree	71.7	28.3	.033	2	.983
Years of office experience					
< 11	75.0	25.0			
11-20	68.9	31.1			
21-30	74.7	25.3			
31 +	71.2	28.8	1.10	3	.776
Years in current position					
< 11	71.6	28.4			
11-20	70.2	29.8			
21 +	81.5	18.5	1.32	2	.517

(a) = Percent of Responses

Differences Between Company Recycling Practices and Variables

In the final analysis, differences between company recycling practices and company demographic variables were compared. See Tables 6, 7, and 8. There was a statistically significant difference between company recycling practices and number of employees, as shown in Table 8.

Table 6

Differences Between Company Recycling Practices and Variable of Location (Population)

Factor	Location (Population--in Thousands)			Chi-Square	DF	p
	< 20 % (a)	20-100 % (a)	> 100 % (a)			
Company Recycles						
Yes 80.4	91.0	85.2				
No	19.6	9.0	14.8	3.89	2	.143
Recycling bins conveniently located						
Yes	82.2	78.2	88.5			
No	17.8	21.8	11.5	3.88	2	.143
Recycling bins clearly marked						
Yes	66.7	66.3	79.8			
No	33.3	33.7	20.2	5.39	2	.068
Recycling facilities in individual offices						
Yes	62.2	69.3	75.0			
No	37.8	30.7	25.0	2.56	2	.278
Written guidelines						
Yes	55.6	65.3	71.2			
No	44.4	34.7	28.8	3.44	2	.179
Contact person available						
Yes	55.6	53.5	61.5			
No	44.4	46.5	38.5	1.43	2	.490
Incentives for recycling						
Yes	13.3	9.9	16.3			
No	86.7	90.1	83.7	1.86	2	.395

(a) = Percent of Respondents

Table 7

Differences Between Company Recycling Practices and Variable of Age (In Years)

Factor	Company Age (In Years)			Chi-Square	DF	p
	< 21 % (a)	21-40 % (a)	> 40 % (a)			
Company Recycles						
Yes 80.4	88.3	86.1				
No	19.6	11.7	13.9	1.40	2	.497
Recycling bins conveniently located						
Yes	75.7	79.2	87.4			
No	24.3	20.8	12.6	4.27	2	.118
Recycling bins clearly marked						
Yes	67.6	66.0	76.0			
No	32.4	34.0	24.0	2.62	2	.269
Recycling facilities in individual offices						
Yes	64.9	66.0	73.1			
No	35.1	34.0	26.9	1.53	2	.451
Written guidelines						
Yes	54.1	67.9	68.3			
No	45.9	32.1	31.7	2.83	2	.244
Contact person available						
Yes	45.9	66.0	58.7			
No	54.1	34.0	41.3	3.64	2	.162
Incentives for recycling						
Yes	10.8	15.1	13.2			
No	89.2	84.9	86.8	0.35	2	.840

(a) = Percent of Respondents

Table 8

Differences Between Company Recycling Practices and Variable of Size (Number of Employees)

Factor	Size (Number of Employees)			Chi-Square	DF	p
	< 100 % (a)	100-500 % (a)	> 500 % (a)			
Company Recycles						
Yes	73.2	88.6	88.3	8.57	2	.014 *
No	26.8	11.4	11.7			
Recycling bins conveniently located						
Yes	61.0	79.0	91.2	22.93	2	.000 *
No	39.0	21.0	8.8			
Recycling bins clearly marked						
Yes	48.8	56.5	83.6	28.94	2	.000 *
No	51.2	43.5	16.4			
Recycling facilities in individual offices						
Yes	53.7	67.7	75.5	7.66	2	.022 *
No	46.3	32.3	24.5			
Written guidelines						
Yes	51.2	58.1	73.0	9.16	2	.010 *
No	48.8	41.9	27.0			
Contact person available						
Yes	39.0	45.2	67.9	16.69	2	.000 *
No	61.0	54.8	32.1			
Incentives for recycling						
Yes	12.2	12.9	13.8	0.09	2	.956
No	87.8	87.1	86.2			

(a) = Percent of Responses

*Significant at the .05 level.

Conclusions

The findings from Research Question 1 documented office employees' perceptions and use of recycled paper in the office. Office employees' perceptions of using recycled paper were positive, and almost three-quarters of the respondents used recycled paper products in their office. When companies allowed use of recycled paper for external communications, over half of the respondents made use of it. Of those office employees who were in a position to order paper products, almost 70 percent ordered recycled paper products.

From the results of Research Question 2, about 85 percent of the companies were recycling. Office employees indicated they had conveniently located recycling bins that were clearly marked, had recycling facilities in their office, and had received written guidelines on recycling. Over half knew a contact person for questions, yet few companies provided any incentives for recycling.

Based on the findings from Research Question 3, there were no significant differences between office employees' perceptions of receiving external communications on recycled paper and the demographic variables of age, education, and office experience. There was a statistically significant difference between the years in current office position and office employees' perceptions of receiving external communications on recycled paper.

The analysis from Research Question 4 indicated that there were no statistically significant differences between office employees' use of recycled paper products and demographic variables. It appears that the variables of age, education, years of office experience, and years in current position did not have an effect on office employees' use of recycled paper products.

Research Question 5 identified differences between company recycling practices and company demographic variables. It appears that company variables of location and age of company did not have an effect on a companies' recycling practices. It is likely, however, that company size did make a difference in companies' recycling practices. Companies with larger numbers of employees (over 500) were more apt to have recycling practices in place than those with fewer numbers of employees.

Recommendations for Business Employers

As indicated in the literature, businesses are very involved with recycling. Trainers in business and industry need to emphasize the importance of recycling to their office employees.

1. Discuss in meetings the importance of recycling to the environment, the types of items that can be recycled, and different ways companies could decrease and manage waste. Set up a committee that could further investigate recycling opportunities.

2. Provide recycling facilities for office employees that are conveniently located and clearly marked. Post written guidelines as to what should be recycled, and have a contact person listed to answer any recycling questions or concerns.

3. Encourage office employees to recycle and use recycled products whenever possible. If office employees order supplies, discuss items that could be ordered on recycled paper. In addition, employers should set an example for office employees by following recycling practices themselves.

Recommendations for Business Educators

Recycling is no longer just a social issue, it is also a business concern. Business educators need to stress to their students the importance recycling will have in their office careers.

1. Discuss recycling issues, concerns, and the necessity of recycling in the office. Make sure classrooms have recycling facilities, and encourage students to practice recycling whenever possible. Teachers could assign projects for students to investigate the recycling practices both at the school and at home. Local businesses could be surveyed so that the teacher could have examples of recycling practices to use for discussions.

2. Visit local businesses to identify their recycling practices, visit landfills to identify items of waste, and have environmental guest speakers lecture on recycling issues. Discuss with students what can be done with the waste and the importance of recycling materials. Educators need to set an example for their students by following recycling practices both in and out of the classroom.

3. Specific, concrete examples business teachers could provide for their students include:

- Provide recycling bins in classrooms for student use.
- Provide a set of detailed guidelines as to the items that should be recycled.
- Reuse paper by accepting computer printouts with data on the reverse side.
- Promote using print preview in computer labs and encourage students to make corrections on the computer

screen, as compared to hardcopy proofreading in order to minimize unwanted printouts.

- Recycle as many other items as possible, including ink cartridges and aluminum cans.
- Contact a student or local organization that would set up a recycling station in your classroom. This could also be used as a fund-raising opportunity.

Recommendations for Further Research

1. This study revealed the majority of office employees in this study were recycling. Further research could determine if and where recycling issues are taught and used in education.

2. As recycling gains in importance, further research should be conducted to determine how businesses are dealing with new recycling problems and issues.

3. This study examined the recycling practices of office employees at work. Further research could determine if office employees recycle on their own time and then determine if there is a relationship between personal and professional practices.

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RELATIONSHIP OF LOCUS OF CONTROL TO TEACHERS' ATTITUDES TOWARD ANNUAL PERFORMANCE EVALUATION

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Abstract

The purpose of this study was to ascertain the relationship of teacher locus of control and attitude toward annual performance evaluations of 218 Florida business education teachers. Teachers viewed the annual evaluation's usefulness for professional development and advancement as limited, and not very helpful in improving classroom teaching. There were no statistically significant differences between teachers' attitudes toward the usefulness and helpfulness of the annual performance evaluation based on teacher locus of control and number of years teaching experience, program area taught, or size of school. There was a statistically significant difference based on gender with males viewing the annual performance evaluation as being less helpful than it was viewed by females. The business teachers surveyed had a locus of control that was more external than internal.

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Educational reform initiatives have moved effective teacher evaluation "to the center stage of school improvement" and "assume that adequate personnel evaluation procedures are in place or can be easily implemented" (Lane, 1990, p. 243). For teacher evaluation to be effective as a school improvement strategy, it must "address a range of problems related to the purpose, methodology, and organizational impact of these evaluations" (Lane, p. 243). In response to legal requirements established at state levels, teachers are required to be evaluated on an annual basis. From a review of research, Andrews and Knight (1987) concluded that teachers resented classroom observations because they felt that such "visits are artificial, disruptive, and subjective" (p. 2) and many teachers felt that teaching was an "art and therefore not subject to quantified evaluation" (p. 1).

Research has provided schools with information relating to the responsibilities and duties, as well as some of the problems, involved in conducting the evaluation process. For example, the principal's responsibility is to become the evaluator at evaluation time. This responsibility is part of the job description and is usually statutory. Because of the many and varied demands for the principal's attention, little time is allotted to completing the evaluation process which, consequently, affects the effectiveness of the evaluation (Kelly & Taylor, 1990). Administrators usually express "lip service" to improvement of teaching through evaluation as evidenced by their use of "drop-in" observations and the use of rating scales that are subjective and require less time to complete than other forms of evaluation (Kelly & Taylor).

In addition, evaluators usually see themselves as managers and are only concerned with applying "rules and procedures" rather than accepting "training responsibilities" (Kelly & Taylor, 1990, p. 102). They also spend little time in becoming experts in how to develop and use evaluative

instruments for instructional improvement and are perceived by teachers as being judgmental (Kelly & Taylor).

When the yearly performance evaluation assessment is used correctly, it can become a way of motivating school personnel and promoting professional growth for teachers. Further, the effective use of performance evaluations may be directly related to whether teachers feel that they are in command of the direction of their lives. This idea is related to an individual's locus of control. Locus of control is defined as "the degree to which people believe their own behaviors to be the determinants of events affecting their lives, as opposed to fate, luck , or powerful others" (Agne, Greenwood, and Miller, 1994, p. 142). Statt (1982) defined the difference between internal and external locus of control: "A personality dimension in which people who have an internal locus feel they have control over what happens to them, and people with an external locus tend to attribute their experiences to outside forces or other people" (p. 77).

Teachers who are being evaluated may view their evaluations differently based upon their locus of control. External locus of control teachers may view evaluations as useless since they feel they are powerless to change the teaching situation in any real way. The internal locus of control teacher may view the evaluation as a way of gaining information to be used to control what is happening in the classroom environment. Considering the locus of control of teachers, it would appear that teachers who have an internal locus of control would exhibit a more positive attitude toward annual performance evaluations because evaluations would be helpful to them in controlling their environment (Hawkes, 1991). To use performance evaluations effectively, more information is needed to determine the best use of evaluations in light of teachers' attitudes and locus of control (Hawkes).

Rotter proposed the concept of locus of control in 1966 to describe the dispositional attitude that a person has toward the ability to affect the environment in which a person lives (Stanley & Burrows, 1991). Rotter, Chance, and Phares (1972) stated that reinforcement, reward, and gratification is accepted universally as vital importance "in the acquisition and performance of skills and knowledge" (p. 260). They pointed out that whether a situation is considered as reinforcement is dependent upon the varying perceptions and reactions to it by different people (Rotter et al.). A person's reaction to a situation is "dependent upon the degree to which the individual perceives that the reward follows from, or is contingent upon, his/her own behavior or attributes versus the degree to which he/she feels the reward is controlled by forces outside of him/herself and may occur independently of his/her own actions" (Rotter et al., p. 261).

The degree of reaction must show a cause/effect "relationship between his own behavior and the reward" (Rotter et al., 1972, p. 261). That perception is referred to as a person's locus control which may be internal or external. Rotter et al. continued:

When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way by an individual, we have labeled this a belief in external control. If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, we have termed this a belief in internal control. (p. 261)

The importance of Rotter's locus of control concept should be in its use in teacher training and teacher evaluation.

According to Hawkes (1991), preparing teachers who are internally oriented should be one of the goals of the education profession.

According to Soh (1988), internally oriented people should be trained as teachers because of the following research findings:

1. The most powerful affect on learning outcomes came from internal teachers who believed they were able to affect student performance.
2. Internal teachers in schools that were considered effective had a greater sense of efficacy and felt more responsibility for their students' learning.
3. Internal teachers were seen by their students as encouraging a more origin-like atmosphere and to have higher achievement scores.
4. Internally experienced teachers' locus of control correlated positively with a more flexible, consultative and student-oriented attitude.
5. Internal teachers held onto positive attitudes toward change and responsibility more.
6. Supervisors rated internal student teachers as making use of a variety of resources and materials, using more appropriate motivational techniques, establishing rapport, using appropriate reinforcement and being more able to motivate.
7. Internal teachers are better able to control the impact of stress.
8. Internal teachers felt a lower degree of emotional exhaustion and depersonalization.

9. Internal teachers held less custodial beliefs about controlling students.

10. Internal teachers gave fewer disciplinary commands and encourage a greater student-directed behavior.

Problem Statement

While much attention has focused on the use of annual teacher performance evaluations as a means of improving teacher effectiveness and ultimately student learning, little information is available regarding whether teacher performance evaluations are perceived by teachers to be useful in their professional development or helpful in improving classroom teaching. Additionally, little is known about how teacher attitudes toward performance evaluations and teacher locus of control affect their perception of the value of the performance evaluation for improving teaching practice.

Purpose and Objectives of the Study

The purpose of this descriptive study was two-fold: (a) to determine the attitudes of Florida high school business education teachers toward their annual performance evaluations, and (b) to determine the relationship of Florida high school business education teachers' locus of control and attitudes toward annual performance evaluations.

Specifically, the objectives of the study were:

1. To determine the attitudes of high school business education teachers toward the usefulness of the annual performance evaluation for professional development and advancement.

2. To determine the attitudes of high school business teachers regarding the helpfulness of the annual performance evaluation in improving classroom teaching.

3. To determine the differences in attitudes of high school business education teachers, if any, toward the annual performance evaluation's usefulness and helpfulness based on number of years of teaching experience, program areas, gender, and size of school.

4. To determine the locus of control for Florida high school business education teachers.

5. To determine the differences, if any, in high school business education teachers' attitudes toward the annual performance evaluation usefulness and helpfulness and their locus of control in improving classroom teaching.

Design of Study

The descriptive design of this study was a cross-sectional survey that collected data from high school business education teachers in Florida school districts. The business education teachers were asked to respond to a questionnaire concerning their annual performance evaluation, locus of control, and selected demographic information.

Instrumentation

A cover letter and questionnaire designed to address the objectives of the study were drafted based upon significant points in the literature review related to usefulness and helpfulness of annual performance evaluations, and locus of control. The questionnaire had four sections.

The first section assessed the respondent's attitude toward the usefulness of annual performance evaluation in professional development and advancement. Participants were asked to respond to six items on a 4-point Likert-type response scale as follows: Strongly Agree, 4; Agree, 3; Disagree, 2; and Strongly Disagree, 1. In section two, participants were asked to

respond in a Likert-type ranking scale to the degree to which evaluations were helpful to the teacher in improving classroom teaching. Section three of the instrument focused on teachers' locus of control. To determine the locus of control, a Likert-type scale developed from a Levinson-adapted form used by Godwin (1991) in a previous study was used. Finally, respondents were asked to indicate the business education program areas they were teaching, number of years of teaching experience, grade levels taught, school population, teacher population, and gender.

Validity and Reliability of Instrument

A draft of the questionnaire was reviewed by the researcher's advisory committee. Content validity was determined through the use of a panel of five individuals who were asked to judge the validity of the questionnaire's item content. The five-member panel was made up of a high school principal, vocational director, superintendent, state supervisor of business education, and state department of education assessment consultant. Copies of the purpose of the study, research questions, research framework, a draft copy of the questionnaire, and a reaction sheet were sent to each panel member. The individuals were asked to read the related items and in their best judgment determine: (a) if the questionnaire items would measure what they were planned to measure were valid, (b) if the data collected from the questionnaires addressed the research questions, and (c) if the research questions and the questionnaire supported the purpose of the study. All appropriate revisions were incorporated into the questionnaire before it was administered to the pilot sample.

The reliability of the instrument was addressed next. The questionnaire was finalized and a copy was administered to 10 vocational teachers. The procedure to establish reliability was to use the test-retest method; the questionnaire was administered to 10 vocational teachers 2 weeks apart. A Pearson Correlation test-retest reliability was determined which

established acceptable reliability coefficients for the questionnaire.

Procedure

The final questionnaire was sent to the 604 business teachers randomly selected for the study. For descriptive research, the sample size of 10 to 20% of the population was recommended (Ary, Jacobs, & Razavieh, 1972). For this study, the population of high school business teachers in Florida totaled 1,008. To insure an adequate sample size of 200 participants, 604 (59.9%) of the total population were selected to receive the survey anticipating approximately a return of 35% or better. A list of the teachers' names was numbered 1-1,008 and the numbers were randomly selected until 604 names were included in the mailing list.

Reliability of Survey Instrument

The research instrument consisted of three sections. Cronbach's Coefficient Alpha was calculated to determine the reliability of the instrument. An acceptable reliability was determined for all sections of the questionnaire. The reliability calculated for each section was as follows: Section 1 = .68, Section 2 = .98, and Section 3 = .68.

Demographic Data

Demographics information collected from the 218 completed surveys is presented in Table 1. Females accounted for 79.1 % of the sample. The mean number of years teaching experience ranged from 1 to over 30 with a mean of 19 years (sd = 7.86). A majority of teachers, 82.6%, taught in schools with student populations over 1,000 and teacher populations of more than 50. Frequency of programs taught were ranked highest to lowest as computer operations, secretarial, accounting, basic business, business administration, and exploration. The majority of the respondents taught 11th and 12th grade students.

Table 1

Demographic Data

Demographic Variable	Number	Percent
<u>Gender</u>	44	20.9
Male	167	79.1
Female	211	100.0
Totals		
<u>Years Teaching Experience</u>		
1-10	39	18.2
11-20	74	34.6
21-30	89	41.6
30 +	12	5.6
Total	214	100.0
<u>Student Population Size</u>		
Less than 500	12	5.8
500-1000	24	11.7
1001-1500	49	23.8
1501-2000	84	40.8
2000 +	37	18.0
Totals	206	100.1
<u>Teacher Population Size</u>		
Less than 50	31	16.1
50-100	83	43.3
101-150	67	34.9
151-200	8	4.1
200 +	3	1.6
Totals	192	100.0
<u>Business Program Areas</u>		
Accounting	38	18.4
Basic Business	29	14.0
Business Administration	11	5.3
Computer Operations	88	42.5
Exploration	1	.5
Secretarial	40	19.3
Totals	207	100.0
<u>Grade Levels Taught</u>		
9th	145	66.5
10th	191	87.6
11th	209	95.9
12th	210	96.3

Teachers' Attitudes Regarding the Usefulness of the Annual Performance Evaluation for Professional Development and Advancement

Six items addressed the teachers' attitudes toward the usefulness of the annual performance evaluation for professional development and advancement using a four point Likert-type scale as follows: Strongly Agree, 4; Agree, 3; Disagree, 2; and Strongly Disagree, 1. Means and standard deviations were calculated for individual and group items.

The means ranged from 1.91 to 2.78 with standard deviations ranging from .88 to 1.02. The means reflected responses that varied widely for the use of the annual performance evaluation for individual classroom and staff development, for career ladder, merit pay, or, possibly, in the retention of a job. The mean for whether the evaluation was seen as threatening or not was 1.91 ($sd = .86$) indicating that the teachers saw the annual performance evaluation as very little threat to them. The lack of threat indicated that the teachers saw the annual performance evaluation as routine rather than something that would have a major impact on their maintaining their job position as a teacher. See Table 2 for data summary.

Teachers' Attitudes Regarding the Helpfulness of the Annual Performance Evaluation in Improving Classroom Teaching

Six items assessed teachers' attitudes toward whether the items were helpful in improving their teaching using a four-point Likert-type scale. The means and standard deviations were computed for the individual items, as well as for the group.

Table 2**Attitude Toward Usefulness of Annual Performance Evaluation for Professional Development and Advancement**

	Survey Question	Mean*	SD
Q11	Used personally	2.77	.96
Q12	Seen as threatening	1.91	.86
Q13	For staff development	2.22	.88
Q14	For career ladder	2.30	.93
Q15	For merit pay	2.17	1.02
Q16	For job retention	2.78	.98

*Strongly agree, 4; Strongly disagree, 1

The means ranged from a low of 2.23 to a high of 2.44 with standard deviations ranging from 1.12 to 1.23. The means reflect the teachers' attitudes that the annual performance evaluations were "somewhat" helpful to the teacher. See Table 3 for data summary.

Table 3**Attitudes Toward Helpfulness of Annual Performance Evaluation in Improving Classroom Teaching**

	Survey Question	Mean*	SD
Q23	Utilize management techniques	2.38	1.15
Q24	Maintain discipline	2.31	1.23
Q25	Knowledge of subject	2.33	1.19
Q26	Plan instruction	2.35	1.19
Q27	Deliver instruction	2.44	1.18
Q28	Other professional competencies	2.23	1.12

*Most helpful, 4; Not helpful, 1

Teachers' Attitudes Regarding Usefulness and Helpfulness of the Annual Performance Evaluation Based on Number of Years Teaching Experience, Program Area Taught, Gender, and Size of School

An analysis of variance (ANOVA) of teacher attitude toward annual performance evaluation usefulness based upon gender, years in teaching experience, program area, and school size was calculated. No significant differences were indicated at the .05 level for usefulness of the annual performance evaluation for professional development and advancement based upon gender $F(1,211) = 1.72, p > .05$, years teaching experience $F(3,211) = .37, p > .05$, program area $F(4,211) = .46, p > .05$, and school size $F(4,211) = .39, p > .05$.

An ANOVA was also computed for attitude toward the evaluation's helpfulness in improving classroom teaching based upon gender, years teaching experience, program area, and school size. There were no significant differences found based on years teaching experience $F(3,211) = 1.36, p > .05$, program $F(4,211) = .98, p > .05$, and school size $F(4,211) = .57, p > .05$. There was a significant difference $F(1,211) = 4.95, p = .08$ based upon gender. Post hoc analysis revealed males viewed the evaluation less helpful in improving classroom teaching than did females.

Locus of Control of High School Business Teachers

Twelve items were used for determining teachers' locus of control. Items 30, 32, 34, 35, 38, and 39 indicated external locus of control measures, and were reversed-value coded to allow a mean and standard deviation to be calculated for each item. The means for the group locus of control ranged from a low of 1.97 to a high of 3.44 while the standard deviations ranged from .62 to .91. Since the lower the score, the more external, teacher scores indicated generally that the group locus of control was externally oriented. See Table 4 for data summary.

Table 4

Locus of Control of Teachers as a Group

	Survey Statement	Mean* *	SD
Q29	Make plans work	3.44	.64
Q30*	Future planning	2.92	.91
Q31	Self-doing	2.81	.80
Q32*	No control	1.97	.80
Q33Q	Control of life	3.06	.63
34*	No control of life	2.69	.84
Q35*	No influence	3.03	.72
Q36	Chance/luck	2.51	.82
Q37	Success equals hard work	3.03	.76
Q38*	Right place at right time	2.44	.69
Q39*	Right people	2.14	.66
Q40	Skills	3.14	.62

*Reversed coded to allow an ANOVA to be calculated

**Strongly agree, 4; Strongly disagree, 1

Teacher's Attitudes Toward the Annual Performance Evaluation
Usefulness for Professional Development and Helpfulness in
Improving Classroom Teaching Based on Their Locus of Control

ANOVA procedures were used to determine if there were differences in the teachers' attitudes toward (a) the annual performance evaluations's usefulness for professional development and advancement and (b) the helpfulness of the annual performance evaluation in improving classroom teaching based on teacher's locus of control.

There were no significant differences in teachers' attitudes toward the usefulness of annual performance evaluations for professional development and advancement for teachers who had an internal (I) locus of control (Items 29, 31, 33, 36, 37, 40), $F(11,211) = .44$, $p > .05$; for teachers who

had an external (E) locus of control (Items 30, 32, 34, 35, 38, and 39), $F(15,211) = 1.39$, $p > .05$; or when both the I and E locus of control were compared, $F(47,211) = .70$, $p > .05$.

There were also no differences in teachers' attitudes toward the helpfulness of the annual performance evaluation in improving classroom teaching based on locus of control $F(11,211) = 1.32$, $p > .05$ for teachers who had an I locus of control (Items 29, 31, 33, 36, 37, 40), for teachers who had an E locus of control (Items 30, 32, 35, 38, and 39) $F(15,211) = 1.14$, $p > .05$, or when both the I and E locus of control of teachers were compared, $F(50,211) = 1.03$, $p > .05$.

Conclusions And Recommendations

The high school business education teachers in Florida who were surveyed in this study:

1. Disagreed that the annual performance evaluation was useful for personal and/or staff development, or for merit pay, career ladder placement, or job retention or helpful in improving teaching in the classroom.
2. Indicated no significant differences in attitudes toward the usefulness of the annual performance evaluation for professional development and advancement based upon gender, years teaching experience, program area, and school size or helpfulness of the annual performance evaluation for improving teaching based upon years teaching experience, program area, and school size.
3. Indicated that the females were more positive than males toward the helpfulness of the annual performance evaluation in improving classroom teaching.
4. Reflected an externally-oriented locus of control.

5. Indicated no significant differences toward the usefulness or helpfulness of annual performance evaluation in improving teaching of the annual performance evaluation based on locus of control.

The teachers surveyed in this study were experienced with an average of 19 years of experience. Nearly 82% of the teachers surveyed had taught more than 10 years and only about 18% had taught from 1 to 10 years. This factor may account for the teachers' views that performance evaluations were not useful for professional development and advancement nor for helping with improving classroom teaching.

As to the helpfulness of the evaluation in improving classroom teaching, and, consequently, in student learning, the teachers surveyed indicated that they believed the evaluations were "not helpful" to less than "somewhat helpful." This is supported by Huberman (1983) who reported that evaluation did not meet the needs of the experienced teacher. In addition, the experienced teachers believed the evaluation process itself was at fault since teaching was seen by them as an "art" and not to be "quantified" (Andrews & Knight, 1987) as well as the fact that they saw classroom observations as being subjective, artificial, and disruptive.

There were no significant differences found in the attitudes of the teachers surveyed toward the usefulness of the annual performance evaluation for professional development and advancement and toward its helpfulness in improving classroom teaching based upon gender, years teaching experience, size of school, and program area. There were no significant differences found between the teachers' attitudes toward the usefulness of the annual performance evaluation for professional and advancement based upon gender. However, there was a significant difference found in the attitude of the males as compared to the female teachers in their belief about the helpfulness of the evaluation. Female teachers were more positive than male teachers--that difference may be due to the

gender stereotyping in our society which says that men should give help as opposed to receiving help in their struggle to achieve on the job (Mayer, 1987).

Since it would be expected that a teacher with an internal locus of control would be a more effective teacher (Hawkes, 1991), the findings from this study tend to be surprising. The respondents indicated by their responses to be "somewhat" more external than internal in their locus of control.

There were no significant differences in the attitudes of teachers toward the evaluation's usefulness for professional development and advancement and to its helpfulness in improving teaching based on the teachers' locus of control. This finding is not surprising since teachers attitudes toward the usefulness of the evaluation and its helpfulness was not very high. They agreed that the evaluation should be used to improve classroom teaching, but they did not agree that the present system of evaluation was doing an effective job of doing just that--improving instruction in the classroom.

Effective systems for teacher evaluation will continue to be needed as pressure for accountability grows. For evaluation systems to be effective, teachers need to feel that the process is both useful in their professional development and helpful in their effectiveness as a classroom teacher. Further research is needed to understand the relationship of teachers' attitudes toward evaluation and the factors, such as locus of control, which affect that attitude.

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INTERNATIONAL BUSINESS, NEBRASKA STYLE: FOREIGN LANGUAGE AND BUSINESS EDUCATION TEACHERS MODEL CURRICULUM INTEGRATION

Bonnie J. Sibert

Abstract

An economy that demands contact and interaction with the global marketplace, problem-solving at the national and international level, competitive job markets, and diverse social settings and interactions are some of the future challenges students will face. Knowledge of language, business and cultures will be their key to surviving and prospering. By developing an integrated curriculum, teachers will be able to provide authentic situations that call on students' capacities to interact socially, use higher-order thinking skills to solve problems and make connections.

The purpose of this article is to identify a variety of models being used by business teachers to integrate complementary international business learning into any business education course. Three models for integrating International Business concepts into foreign language, marketing and business education curricula are identified. A teacher-training institute, International Business Day for students and teachers, and an International Camp for students are presented.

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The integration of academic and vocational education is impacting American high schools. Teachers are collaborating to strengthen coursework for both college-bound and career-bound youth. College preparatory courses are incorporating hands-on methods from vocational education, while vocational courses are incorporating basic and advanced academic content for vocational students. A marriage between academic and vocational education is replacing a sibling rivalry as theory and practice are brought together. The result is that all students are able to make real-life connections throughout the learning process. (Baum, Filmer, Lavaty, Maxon, Sibert, Woepfel, and Woodland, 1996).

According to Dr. Doug Christensen, Nebraska Commissioner of Education (Baum, et al., 1996), integration of academic and vocational education will strengthen education and should result in tearing down old barriers and creating new learning opportunities for all students. Integration of academic and vocational education should be based on answers to two critical questions:

- What should students learn?
- How do they best learn it?

If we begin with these questions and design the curriculum as learning opportunities for students, the integration of academic and vocational education will likely occur. In addition, more meaningful learning for students will be achieved.

Curriculum Integration Models

Throughout the nation, schools have developed numerous integration models to improve academic and technical achievement. Schools new to the movement, therefore, have access to a growing body of practice and theory to draw upon as they develop effective local programs.

In Nebraska, the methods of integration are determined at the local level. The process a local district uses to develop a shared vision is the most important aspect of developing integrated curriculum. A supportive environment that is open to change will allow teachers to design and implement curricula that best fit the needs of their students. According to research completed by the Southern Region Education Board (SREB), the following are key to the integration process: team building and collaboration among teachers, increased planning time for teams, creative scheduling, teacher empowerment to develop ownership, delegation of responsibility and relevant professional development activities (SREB, 1994).

The Enhancing Learning Environments Through Curriculum Integration document (1992) is an initial effort of the Nebraska Department of Education (NDE) to assist Nebraska's schools in understanding the nature and value of integrating vocational and academic education. "The mission of integrated learning is to create a partnership that brings academic and vocational educators together to plan and implement the integration of academic and vocational education in challenging, quality, equitable and accountable programs of study" (p. 1). The 1992 document identified seven different models of integration. Each integration model included examples of courses being taught at specific Nebraska schools. In an effort to provide more examples of best practices occurring in Nebraska, two subsequent documents were prepared in 1996 and 1997.

Connecting Nebraska's Business Education and Foreign Language Frameworks

Since 1992, Nebraska schools have been learning about and incorporating curriculum integration models. Secondary business teachers have teamed with English, math, social studies and foreign language teachers to provide connected learning across many subject areas. The focus of this article will be to identify a variety of models being used by Nebraska

business teachers to infuse complementary international business learning in any business education course.

Because today's businesses function in a global society, "business students must acquire both job-specific skills and broad, transferable attitudes, skills and knowledge to function in a global marketplace" (Policies Commission, Statement 52, 1992). NBEA's International Business standards are focused on the broad content outcome of developing an understanding of the interrelationships among one country's political and economic policies and business practices to another country's (Haynes, 1998, p. 31). Under this content umbrella are nine specific standards that support the study of international business with emphasis on Awareness, International Business Communications, Environment, Ethics, Finance, Management, International Marketing, Import/Export & Balance of Trade and Organizational Structure (National Standards for Business Education, 1995).

The Nebraska Business Education Framework and the Nebraska K-12 Foreign Language Frameworks both include performance standards indicating that "Students will understand international and domestic business concepts from a multicultural, global perspective" (Nebraska Business Education Framework, 1994; Nebraska K-12 Foreign Language Frameworks, 1996).

With frameworks in place at the state level and standards in place at the national level, the focus in Nebraska on curriculum integration opened the door to several new projects.

World Language Business Institute

In 1995, the Nebraska Department of Education (NDE) became the second recipient of the International Education Award established by the Council of Chief State School Officers. The \$10,000 biennial award provided the funding for the World Language Business Institute held during July, 1997. The NDE

Foreign Language and Business Education Departments partnered with Teachers College at the University of Nebraska-Lincoln to provide a two-week institute that offered three hours of graduate credit. Eleven business and marketing teachers and nine foreign language teachers each received a stipend for participating in the World Language Business Institute. The Institute had originally been named the "International Business Institute" but was changed to be more acceptable by the foreign language teachers.

Darla Domke of Florida State University provided two full days of instruction in language and international business skill development. Domke, who is fluent in four languages, has lived and traveled extensively in Europe and the former eastern block countries.

Institute participants also learned more about Nebraska resources through a panel discussion and shadowing experiences in area international companies. Teacher participants gathered a comprehensive profile of international communications and day-to-day business practices within the companies they visited. Teams of teachers used this information to develop curriculum based upon their shadowing experiences.

As participants shared their shadowing experiences, the following key discoveries were summarized by the participants:

- Students need to understand the related economic and social systems of countries.
- Students need to develop international business skills and sensitivity to cultural conditions in both domestic and foreign markets.
- Students need to understand the importance of global trade in the 21st century.

The general content of the Institute combined the resources of the Nebraska K-12 Foreign Language Frameworks, the Nebraska Business Education Framework and the National Standards of both Business Education and Foreign Language. Nine teams of Institute participants developed the following integrated business/foreign language units of instruction that can easily be infused into existing business and/or foreign language courses:

- **“Ad-ing” It All Up**—Students will be exposed to and explore advertising of companies with a multicultural presence by comparing and contrasting advertisements in several different languages.
- **It’s an “Ad-mazing” World**—Students will research a culture and prepare two multimedia presentations—one on the country and one on an advertising campaign for that country.
- **Basic Cultural Knowledge Unit**—Students will recognize the importance of well known cultural icons and be able to use the terms intelligently.
- **Culture Awareness in International Business**—Students will be able to understand and demonstrate an awareness of cultural differences in business practices between the United States and Latin American countries.
- **Foreign Exchange Rate Game**—Students will be able to identify the currency of three European countries and calculate the exchange of one country’s currency to another country.
- **Global Business Topics/Trends Forum**—Students will utilize technology, local international businesses and

resources from foreign countries to research a global business topic. Students will prepare and compose a presentation based on their research to orally present in a forum on global business topics and trends.

- **Global Marketplace at Home**—Students will interact appropriately in the target language in real-life situations; use resources in the community to research the local and target culture(s); develop a “store” and market international products using the basic elements of the marketing mix, calculating currency rate exchanges and incorporating culturally appropriate promotional strategies for various economic systems; and educate a segment of the community by giving a presentation and/or operating a school store.
- **Protocol for Ports of Call**—Students will plan and role play an international business negotiation.
- **World Language Business Institute Web Site**—A wealth of resources for students and teachers is available at <http://www.edneb.org/BUSED/CI/wbihome.html>.

The integrated units of instruction were delivered to teachers through regional workshops. Access to the newly developed curriculum is available via the Nebraska Department of Education web site at <http://www.edneb.org/BUSED/be.html>.

International Business Day

Three International Business Day events have been hosted by the Business Division and Department of Modern Languages at Doane College in Crete, Nebraska. The planning

and implementation of this one-day event was provided by representatives from the Nebraska State Business Education Association, the Nebraska Foreign Language Association, the Nebraska Association of Marketing Educators, Delta Pi Epsilon and the Nebraska Department of Education.

Each year the event has been held on a Saturday with good attendance by students and teachers. A grand total of 134 teachers and 416 students have participated during the last three years. Keynotes on International Etiquette and the American Free Enterprise System as well as cultural entertainment in the form of Hispanic sword dancing have been featured. Students and teachers have explored the culture through "Explore a Country" sessions conducted by University of Nebraska-Lincoln college students from Japan, Indonesia, Venezuela, Germany, Egypt, France, India, China, Ecuador/Honduras and Africa.

Students also had the opportunity to attend Career Share Shops conducted by business and industry representatives working in international markets. Teacher sessions have allowed Nebraska foreign language, marketing and business teachers to exchange teaching strategies and curriculum.

On October 18, 1997, negotiations filled the air at Doane College as high school students became international traders for a day. Some were buyers, some were sellers, but all were winners as they participated in Global TradeWins, an international trade simulation.

Eleven international trade consultants representing businesses from both Nebraska and Kansas helped facilitate the Global TradeWins simulation conducted by Jean Teel, International Language Specialist from Shawnee Mission Schools, Kansas.

Throughout the simulation, students formed companies and made transactions based on the preliminary sales and marketing of their company's product. Students learned about invoicing, letters of credit, customs, shipping, communications and payment procedures.

Further information concerning the International Business Day and curriculum resources is located on the World Language Business Institute web site. The fourth International Business Day, which will be held on October 16, 1999, in Omaha, is currently in the planning stages.

Nebraska International Camp

The Nebraska International Camp offers French, German and Spanish language instruction to 10- through 16-year old students. The camp is open to students who have never studied a language, as well as to those who are presently studying a foreign language. Serving youth since 1978, the Nebraska International Camp provides students the opportunity:

- to develop an understanding of people of the world by learning and living their cultures and customs.
- to further their knowledge of international art, music and history through activities, projects and participation in cultural events.
- to begin or develop their listening and speaking skills in French, German or Spanish.

Students will also study how art, crafts, music, history, business and science relate to the international community while enjoying the wooded camp set above the Platte River. Funding through the Stanley Foundation has allowed the focus of the camp to embrace and expand the integration of history, art, business and science while immersing the students in language

acquisition. Further information concerning the camp can be found at <http://www.edneb.org/FORLG/NIC/langcamp.htm>.

Summary

Student learning in Nebraska has been strengthened through curriculum integration. The creativity and initiative of teachers, administrators, parents, school boards and communities are creating multiple ways of linking and merging curricula.

The collaboration shown by business and foreign language teachers has benefited Nebraska students. New partnerships with business and industry have provided real-world applications for students and teachers. Nebraska classrooms, like those of the rest of the nation, reflect an increasingly diverse student population. This richness of diversity opens challenges and opportunities unlike any that have taken place in education.

Meeting the needs of a heterogeneous group of students requires a rethinking of teaching and learning practices. The familiar paradigm of schedule and curriculum confined to content areas and bound by limited time periods does not address today's generation of learners.

A new area in business and international commerce demands an efficient and constantly changing curricula. Nebraska educators have recognized that significant improvement in education can be achieved by capitalizing on existing and new themes that cross curriculum areas and connect to the real world. Business Education and Foreign Language educators in Nebraska are now better equipped to prepare students for employment and advancement in Nebraska's growing international economy. The collaborative effort between the Nebraska Department of Education and the state associations for marketing, business and foreign language fosters an atmosphere of partnership that has developed

teamwork between teachers, increased potential classroom resources and encouraged curriculum integration.

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Cabell's Directory of Publishing Opportunities in Management and Marketing

Cabell's Directory of Publishing Opportunities in Management and Marketing Seventh Edition, 1997-1998. Cabell, David W. E. and Deborah L. English, Editors. Cabell Publishing Company, Box 5428 Tobe Hahn Station, Beaumont, Texas 77726. (ISBN 0-911753-11-7) 3 volume set, 1,935 pages, \$89.95, paper. Price includes shipping and handling for all U.S. Add \$20 for shipping and handling via surface mail or \$100 for shipping air mail to countries outside United States.

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